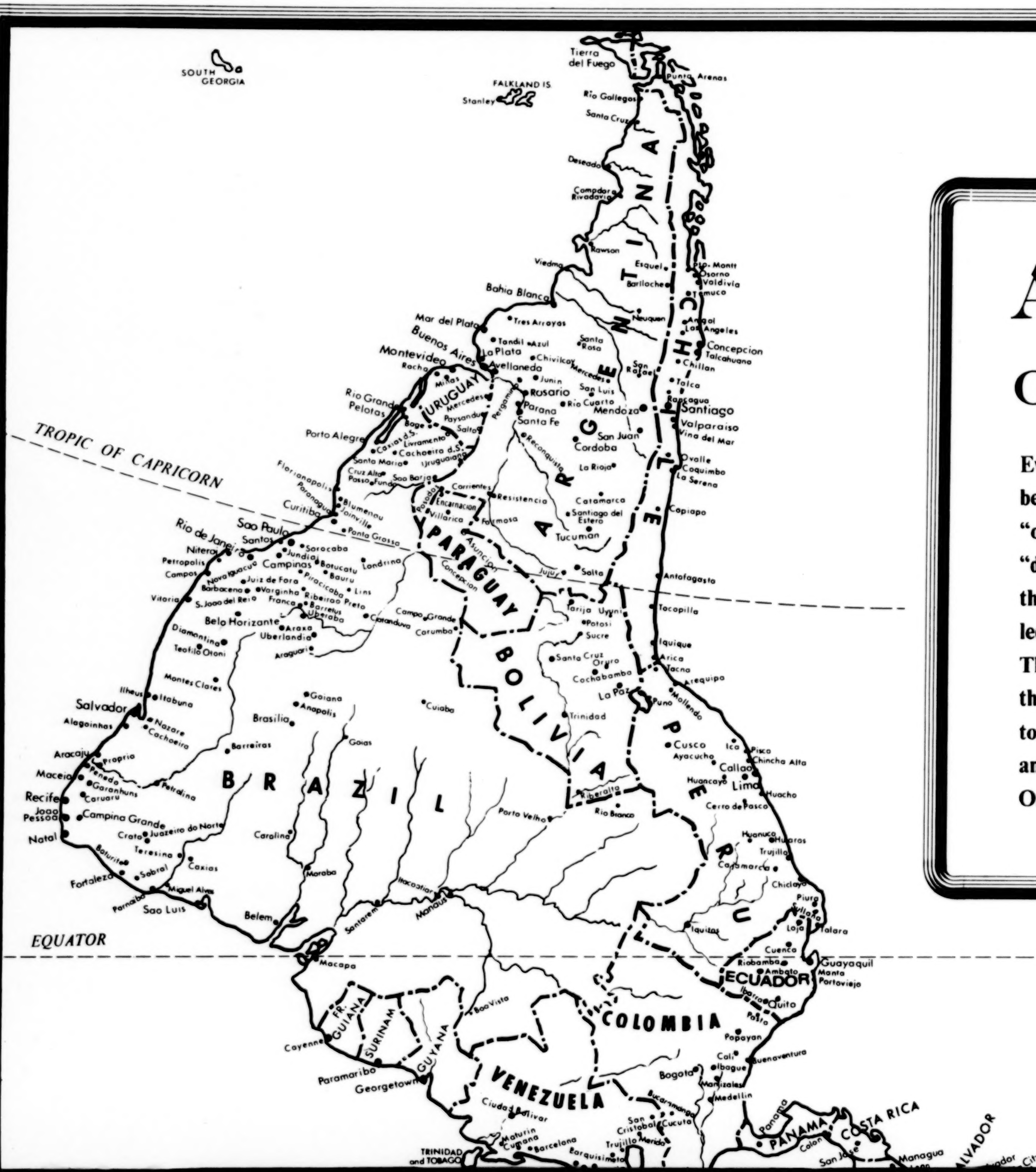
COEVOLUTION

DAISY WORLD: A Formal Proof of the Gaia Hypothesis, by James E. Lovelock, page 66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Punta Arenas
Rio Gallegos
Santa Cruz
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Comodoro Rivadavia
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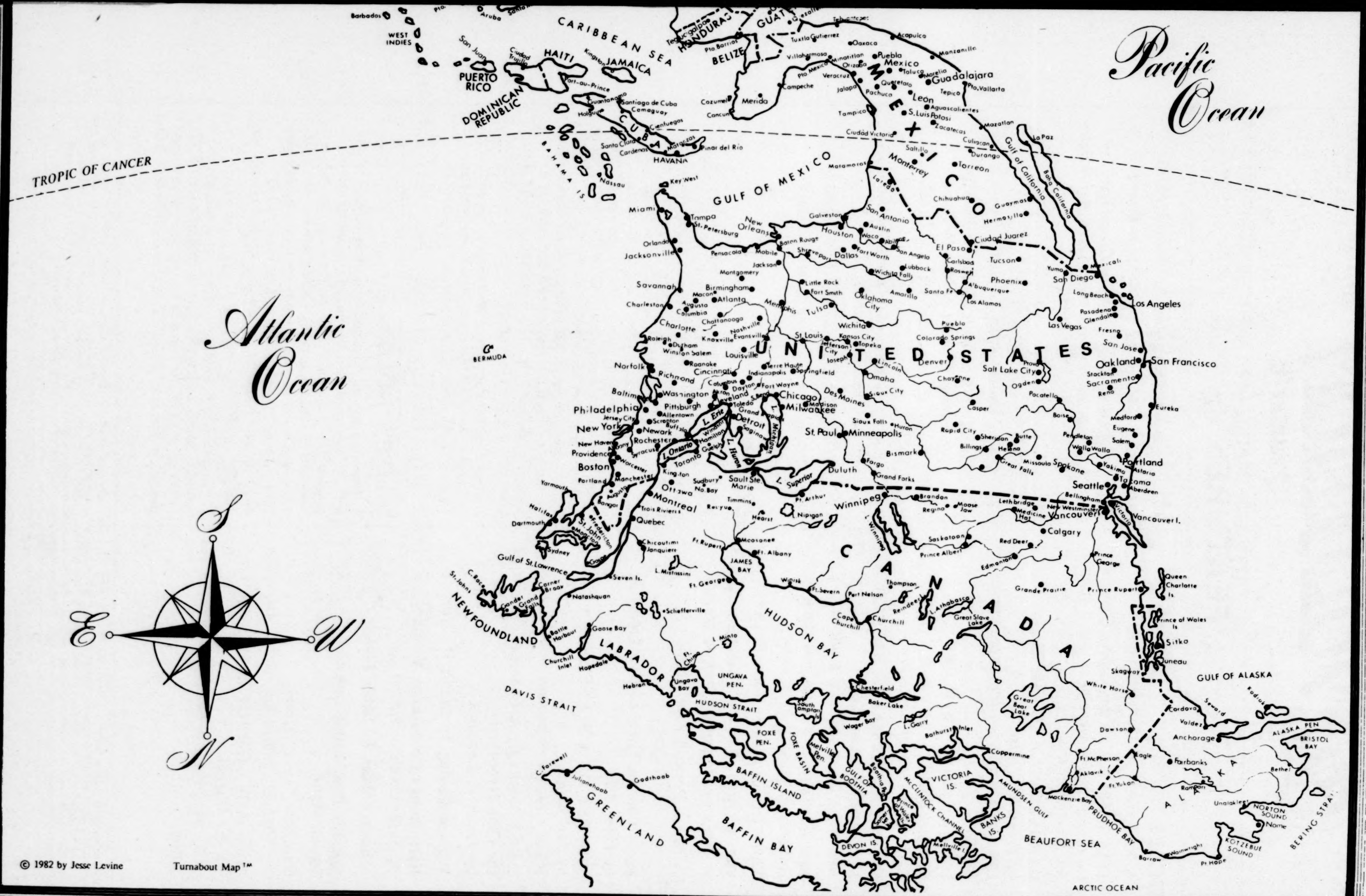
Viedma
Bahia Blanca
Mar del Plata
Buenos Aires
La Plata
Avellaneda
Montevideo
Rosario
Santa Fe
Cordoba
Mendoza
San Juan
Tucuman
Salta
Jujuy
Corrientes
Resistencia
Asuncion
Santiago
Valparaiso
Concepcion
Antofagasta
Iquique
Arica
La Paz
Santa Cruz
Cochabamba
Sucre
Potosi
Cusco
Lima
Callao
Guayaquil
Quito
Cali
Bogota
Medellin
Caracas
Ciudad Bolivar
Georgetown
Paramaribo
Cayenne
Belem
Manaus
Macapa
Sao Luis
Fortaleza
Natal
Joao Pessoa
Recife
Maceio
Aracaju
Salvador
Belo Horizonte
Rio de Janeiro
Sao Paulo
Santos
Curitiba
Porto Alegre
Rio Grande
Pelotas
Brasilia
Goiana
Cuiaba
Porto Velho
Iquitos
TROPIC OF CAPRICORN
EQUATOR
ARGENTINA
CHILE
URUGUAY
PARAGUAY
BOLIVIA
PERU
BRAZIL
ECUADOR
COLOMBIA
VENEZUELA
GUYANA
SURINAM
FR. GUIANA
TRINIDAD and TOBAGO
PANAMA
COSTA RICA
SALVADOR
Managua
San Jose
Colon

A NEW WORLD of Understanding

Ever since maps were first drawn, certain countries have been located at the top, others below. Since "on top," "over," and "above" are equated with superiority, while "down there," "beneath," and "below" imply the reverse, these wholly arbitrary placements, over the years, have led to misconceptions and misjudgments.

This Turnabout Map of the Americas serves to correct the imbalance. It focuses attention in new directions toward areas of exploding populations, energies, and potentialities. It is geographically correct.

Only the perspective has been changed.


Pacific Ocean
Atlantic Ocean
TROPIC OF CANCER
CARIBBEAN SEA
GULF OF MEXICO
WEST INDIES
Barbados
Aruba
San Juan
PUERTO RICO
DOMINICAN REPUBLIC
HAITI
Port-au-Prince
JAMAICA
Kingston
CUBA
HAVANA
Santiago de Cuba
Camaguey
Cienfuegos
Santa Clara
Cardenas
Pinar del Rio
Guantanamo
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BERMUDA
HONDURAS
Tegucigalpa
GUAT.
BELIZE
Pto Barrios
MEXICO
Mexico
Guadalajara
Acapulco
Oaxaca
Tuxtla Gutierrez
Villahermosa
Minatitlan
Puebla
Toluca
Morelia
Manzanillo
Orizaba
Veracruz
Queretaro
Leon
Jalapa
Pachuca
Tepico
Pto. Vallarta
Campeche
Cozumel
Cancun
Merida
Tampico
S. Luis Potosi
Aguascalientes
Zacatecas
Ciudad Victoria
Mazatlan
Culiacan
Durango
Saltillo
Monterrey
Torreon
Matamoros
Laredo
Chihuahua
Guaymas
Hermosillo
Ciudad Juarez
La Paz
Baha California
Gulf of California
Mexicali
Key West
Miami
Tampa
St. Petersburg
Orlando
Jacksonville
Savannah
Charleston
New Orleans
Baton Rouge
Mobile
Pensacola
Jackson
Montgomery
Birmingham
Macon
Atlanta
Augusta
Columbia
Charlotte
Chattanooga
Nashville
Knoxville
Evansville
Raleigh
Durham
Winston Salem
Roanoke
Louisville
Norfolk
Richmond
Cincinnati
Washington
Baltimore
Philadelphia
Pittsburgh
Allentown
Jersey City
New York
Newark
Scranton
New Haven
Providence
Boston
Worcester
Manchester
Portland
Syracuse
Rochester
Buffalo
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L. Erie
Toronto
Hamilton
Guelph
Kingston
Ottawa
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Quebec
Trois Rivieres
Sudbury
No Bay
Sault Ste. Marie
L. Huron
L. Michigan
L. Superior
Detroit
Saginaw
Cleveland
Toledo
Akron
Columbus
Dayton
Fort Wayne
Indianapolis
Terre Haute
Springfield
St. Louis
Jefferson City
Joseph
Kansas City
Topeka
Chicago
Milwaukee
Madison
Grand Rapids
Des Moines
Lincoln
Omaha
Sioux City
Sioux Falls
Huron
St. Paul
Minneapolis
Duluth
Fargo
Grand Forks
Bismark
Memphis
Little Rock
Fort Smith
Tulsa
Oklahoma City
Wichita
Wichita Falls
Amarillo
Lubbock
Dallas
Fort Worth
Waco
Austin
Houston
Galveston
San Antonio
San Angelo
Abilene
Shreveport
El Paso
Carlsbad
Roswell
Albuquerque
Santa Fe
Los Alamos
Tucson
Phoenix
Pueblo
Colorado Springs
Denver
Cheyenne
Casper
Rapid City
UNITED STATES
Salt Lake City
Provo
Ogden
Pocatello
Boise
Sheridan
Butte
Billings
Helena
Great Falls
Missoula
Spokane
Pendleton
Walla Walla
Yakima
Seattle
Tacoma
Aberdeen
Astoria
Portland
Salem
Eugene
Medford
Eureka
Reno
Sacramento
Stockton
Oakland
San Francisco
San Jose
Fresno
Las Vegas
Glendale
Pasadena
Long Beach
Los Angeles
San Diego
Yuma
CANADA
Winnipeg
Brandon
Regina
Moose Jaw
Lethbridge
Medicine Hat
Calgary
Red Deer
Saskatoon
Prince Albert
Edmonton
Grande Prairie
Prince George
Prince Rupert
Vancouver
Victoria
Vancouver I.
Bellingham
New Westminster
Queen Charlotte Is.
Prince of Wales Is
Sitka
Juneau
Skagway
White Horse
Dawson
GULF OF ALASKA
Kodiak
Seward
Cordova
Valdez
Anchorage
ALASKA PEN
BRISTOL BAY
Bethel
Fairbanks
Eagle
Ft. Yukon
Rampart
ALASKA
Unalakleet
NORTON SOUND
Nome
BERING STRAIT
KOTZEBUE SOUND
Pt. Hope
Wainwright
Barrow
PRUDHOE BAY
ARCTIC OCEAN
BEAUFORT SEA
Mackenzie Bay
Aklavik
Ft. McPherson
AMUNDSEN GULF
BANKS IS.
VICTORIA IS.
McCLINTOCK CHANNEL
Melville I.
DEVON IS.
GULF OF BOOTHIA
Boothia Pen.
Coppermine
Great Bear Lake
Great Slave Lake
L. Athabasca
Reindeer L.
Bathurst Inlet
L. Garry
Baker Lake
Chesterfield
Wager Bay
Southampton Is.
Melville Pen.
FOXE BASIN
FOXE PEN.
BAFFIN ISLAND
BAFFIN BAY
GREENLAND
Godthaab
Julianehaab
C. Farewell
DAVIS STRAIT
HUDSON STRAIT
HUDSON BAY
JAMES BAY
Churchill
Cape Churchill
Port Nelson
Thompson
Ft. Severn
Winisk
Ft. Albany
Moosonee
Ft. Rupert
Ft. George
Nipigon
Ft. Arthur
Hearst
Timmins
L. Winnipeg
Ungava Bay
UNGAVA PEN.
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Ft. Chimo
Schefferville
L. Mistassini
Chicoutimi
Jonquiere
Seven Is.
Natashquan
Goose Bay
LABRADOR
Hebron
Hopedale
Churchill Inlet
Battle Harbour
NEWFOUNDLAND
Corner Brook
Gander
Grand Falls
St. Johns
C. Race
Gulf of St. Lawrence
Sydney
Halifax
Dartmouth
Yarmouth
St. John
Moncton
Fredericton
Bangor
Augusta
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E

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Turnabout Map™

With several articles in this issue on the Third World, we were especially taken with this clever map when it recently came through our door. Titled the "Turnabout Map of the Americas," it measures 17"× 23" and is available for $2.40 postpaid from Laguna Sales, 7040 Via Valverde, San Jose, CA 95135.

—Jay Kinney

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COVERS

*The illustration for this issue's front cover is by Tom Parker, compiler of "Rules of Thumb" (**CQ**, Fall 1982), and long-time **CQ** artist of distinction. Using James E. Lovelock's "Daisy World" computer-model as a springboard, Tom conjured up a scene of black and white animals amidst the black and white daisies of Lovelock's hypothetical planet. The rainbow-hued strips at top and bottom are Kathleen O'Neill's idea. They're printers' color bars which help pressmen judge the amount and density of inks used on 4-color print jobs. Normally trimmed off, they're included here as a glistening contrast to the two-toned Daisy World. For Lovelock's article, see page 66.*

The haunting photograph of Alex Grey's "Sirens" on the back cover is by the artist himself. For more see "Victim Nightmares, Sacred Mirrors" on page 35.

—Jay Kinney

* "LITE"/"BOLD"

***CoEvolution** comes in two editions these days. The one with "BOLD" on the cover has the standard mix of articles. The one with "LITE" on the cover has the same standard mix **minus** sexually explicit articles. The only difference in this issue is a two-page report by Michael Phillips on p. 95 called "Japanese 'Love' Hotels" — about special hotels for private recreational sex that are common in Japan.*

The choice of two editions is offered as a courtesy to readers. Subscribers who prefer to receive either "CQ LITE" or "CQ BOLD" should let us know. (If you don't designate, you get "BOLD.")

—Stewart Brand

The CoEvolution Quarterly ☐ Issue No. 38 ☐ June 21, 1983 (USPS 077-150). Published quarterly by POINT, a California nonprofit corporation. Office of publication (editorial and subscription): Box 428, Sausalito, CA 94966 (27 Gate Five Road). Subscriptions: $18 per year. Inquire for international air rates. Second-class postage paid at Sausalito, California, and at additional mailing offices. Claims for missing issues will not be honored later than six months after publication. Back issues are available from **CQ** or on mirofilm and as xerographic reprints from University Microfilms International, Serials Bid Coordinator, 300 Zeeb Road, Ann Arbor, MI 48106.
CoEvolution Quarterly is indexed by the Alternative Press Index: The Supplementary Index to Periodicals and by the New Periodicals Index.
Recent **CQ** mailing list renters: American Civil Liberties Union, Friends of the Earth, Chinook Learning Community, Common Cause, C.G. Jung Institute of the Pacific, Union of Concerned Scientists, Ben Ruhe/Boomerang, Source Net, New Age Book Review, Sufi Order of the Great Smokies, SANE, Cousteau Society, New Society Publishers, Public Media Center, Mother Jones, Planned Parenthood.

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Subscription circulation: 23,000. Newsstand circulation: 8,080.
POSTMASTER: Send address changes to **CoEvolution Quarterly**, P.O. Box 428, Sausalito, CA 94966.

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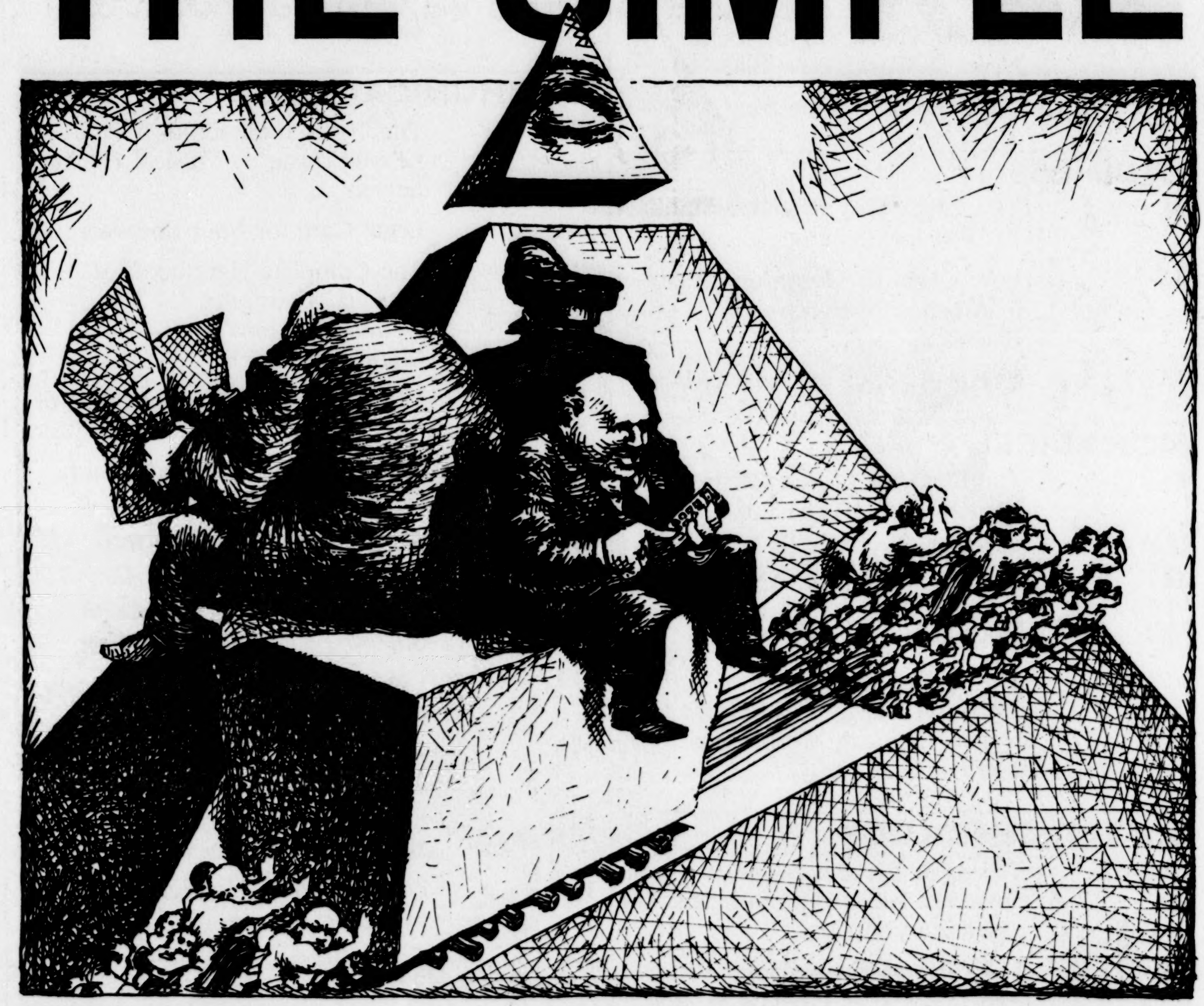
THE SIMPLE



by Robert Gnaizda

illustrated by Matthew Wuerker

> "To tax and to please, no more than to love and be wise, is not given to men."
>
> —*Edmund Burke, speech on American taxation (1774)*

THE PRESENT FEDERAL INCOME tax code, an incomprehensible 1784 pages, is longer than the aggregate of the Bible, the Koran, and the major Buddhist scripture. As a result:

- The vast majority of Americans have no faith in the tax system and their government and/or feel righteous in violating such tax laws;

He who taxes the piper calls the tune. Sometimes, especially at this time of year, I suspect that we would hop around on one foot holding our left little finger aloft and declaiming the Pledge of Allegiance in falsetto if there were declared to be any tax advantage in it. Our most intimate relation with our government (apart from military service or prison) is a demeaning one, ultimately to both parties.

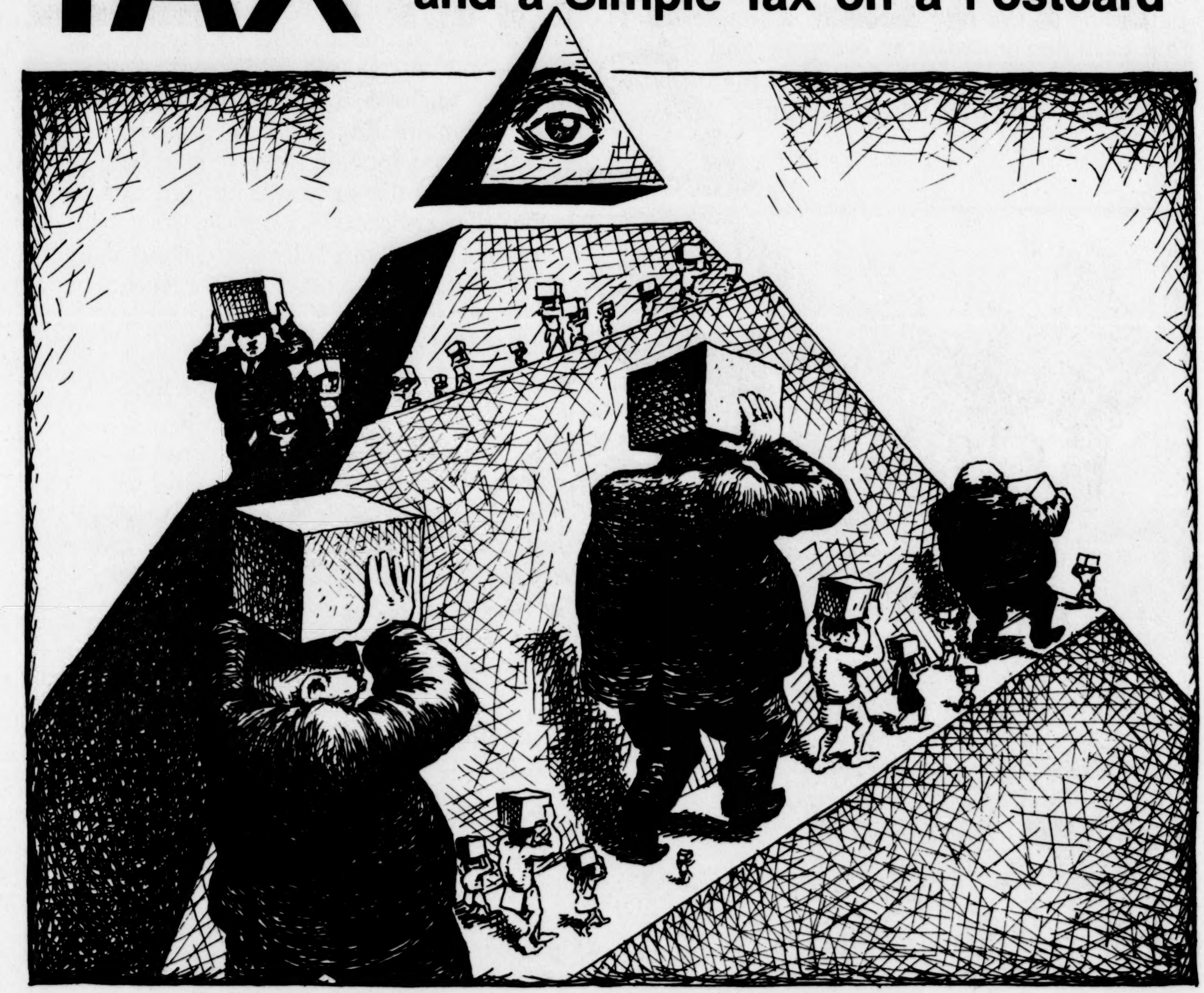
Bob Gnaizda is a public-interest lawyer specializing in having good ideas and carrying them through. He is a partner of the national public-interest law firm Public Advocates, Inc., San Francisco, California, which represents clients without charge (it secures most of its revenue through attorney's fees assessed by the court against the losing party, usually a giant corporation or major government entity). Formerly a Los Angeles tax attorney, Gnaizda at present is national tax counsel to the League of United Latin American Citizens.

Work is under way for a California state initiative for the Simple Tax. See sidebar at the end of the article.

—Stewart Brand

TAX

Common Sense Government and a Simple Tax on a Postcard



- Ninety-nine percent of Americans are functional illiterates since, with the exception of some, but not all, tax attorneys and certified public accountants, no one understands the implications of a system that is incomprehensible, counterproductive to a post-industrial society, and often violative of all our training and experience in logic, reason and ethics;
- Fourteen thousand tax-loophole lobbyists employed by a wealthy few, through their control of tax revenue, are, in effect, the ultimate arbiters of nuclear-armament and social-welfare programs.

To replace our complex federal tax system, a diverse and bipartisan group of U.S. senators are urging a federal simple or flat tax that would fit on a postcard. This federal simple tax could be understood by an average eight-year-old and a very bright five-year-old. Such a tax would cover all income from every source and eliminate every deduction, no matter how meritorious.

What has been largely unnoticed is that California, due to its unique initiative process that bypasses legislative mazes, could well be the first governmental entity to have a simple tax. In fact, Governor George Deukmejian may very well have a Simple Tax on a Postcard before his term in office ends.

Alan Rothenberg, a senior officer at the Bank of California and formerly California's secretary of business and transportation, says that "given the willingness of California to use the initiative process to bring about change, California could well enact a flat or simple tax prior to the federal government." The chances of this are enhanced, he adds, because the state's current fiscal problems "may be more readily solvable by an easily adjustable flat tax than the present maze of complex and/or unsupportable alternative taxes."

John O. Wilson, senior vice president and chief economist for the Bank of America, believes that "the flat or simple tax is more appropriate and likely on a state than federal level for two reasons. Firstly, there are no legal or economic justifications in an open economy for a state progressive tax due to potential for evasion. Secondly, a simple tax that is understandable by everyone and treats all taxpayers equitably would be a major step forward in state and local taxation."

Billionaire Hunt and a Bottle of Cabernet

No one who labors in a factory or owns a small family business wants to pay more in taxes in one *day* than a billionaire pays in one *year*. Yet, over a recent three-year stretch, Texas *billionaire* Bunker Hunt paid only enough federal income taxes to purchase just one solitary bottle of good, but not excellent, Napa Valley cabernet sauvignon. (According to **Fortune** magazine, billionaire Hunt paid just $9.75 in income taxes for the entire three-year period of 1975-77, and did so *without* violating the law.)

California's United States Senator Pete

I LOVE RON
E.R.
E.R.

THE PRESIDENT'S PROPOSED VALENTINE'S GIFT TO CORPORATIONS WAS UNNECESSARY

Just before Valentine's Day 1983, President Reagan said that the federal corporation tax *should be* abolished. The president was incorrect as to his tense. For all practical purposes, the corporation tax has been abolished, particularly as a result of the President's Economic Recovery Tax Act of 1981, which provides for $500 *billion* in additional tax benefits to corporations during the 1980s.

This de facto abolition of the corporate tax has substantially raised individual and social-security taxes. Thirty years ago, corporations were responsible for over 30 percent of federal revenues. Last year, they were responsible for only 7 percent of federal revenues.

A dramatic illustration of this is that in 1950 corporate taxes contributed as much to the federal treasury as did the individual income tax ($17 billion each). Today, the individual contribution is six times greater than the corporate.

Even more striking is that corporate taxes, which in 1950 contributed five times as much to the treasury as social-security taxes ($17 billion vs. $3 billion), now contribute only one-fourth as much ($47 billion vs. $186 billion).

Shift From Corporate To Individual Tax

	1950	1982
Corporation Tax	**$17 billion**	**$ 47 billion**
Individual Tax	**17 billion**	**299 billion**
Social Security Tax	**3 billion**	**186 billion**

One of the most disturbing examples of our ineffective corporate-tax policy is that in 1981 commercial banks, despite being subject to a 46 percent corporate tax, paid a tax of less than 3 percent (2.3 percent) on a record $15 billion in profits. This is less than the minimum federal individual tax rate (11 percent) or the sales tax in most states. The second largest bank, Bank of America, paid no income tax in 1981. But it was not alone. Five of the other top 20 banks paid no taxes and in fact received refunds.

These examples are not unique. Despite the 46 percent corporate tax rate, the average corporation is taxed at a 20 percent (20.5 percent) rate. And utilities and the oil industry pay, on the average, less than 10 percent.

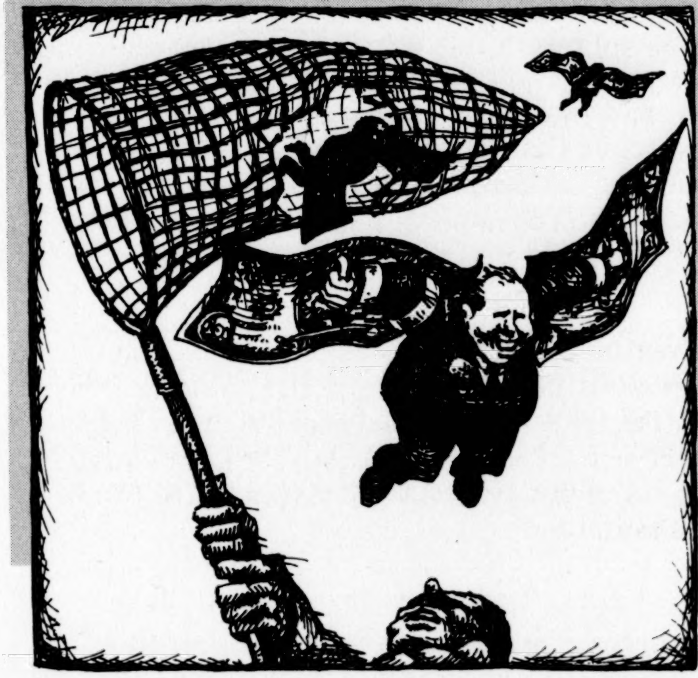
The Brookings Institute estimates that as a result of tax gimmicks, for every corporate dollar of profit taxed almost two dollars ($1.88) of profits will go untaxed by 1987.

If corporations were merely taxed on all their profits, as are most wage earners, the federal government would generate an extra $100 billion of revenue. Alternatively, an effective loophole-free 25 percent maximum corporate tax would produce more revenue than the present 46 percent nominal corporate rate.

THE POWER OF TAX LOOPHOLE LOBBYISTS

According to the *Wall Street Journal*:

> **Agents of the Equitable Life Assurance Society of the U.S. turned in their *best* performance *ever* last year; they sold $35 *billion* in new life insurance.**



> **What makes the feat even sweeter for the giant life insurance company, it won't have to share any profits with Uncle Sam.**
>
> **The source of Equitable's good fortune is a complex and controversial tax loophole employed by the biggest U.S. insurance companies to shrink drastically their income-tax bills.**
>
> **[This loophole is referred to under the euphemism "modified coinsurance" contracts.] The General Accounting Office recently put the [annual] loss at $3.4 billion.**
>
> **A vice-president for Equitable said, "For a company of our size and stature, I think we would expect to pay taxes, so it isn't a desirable position to be in."**

**(*Wall Street Journal*,
March 30, 1982;
emphasis added)**

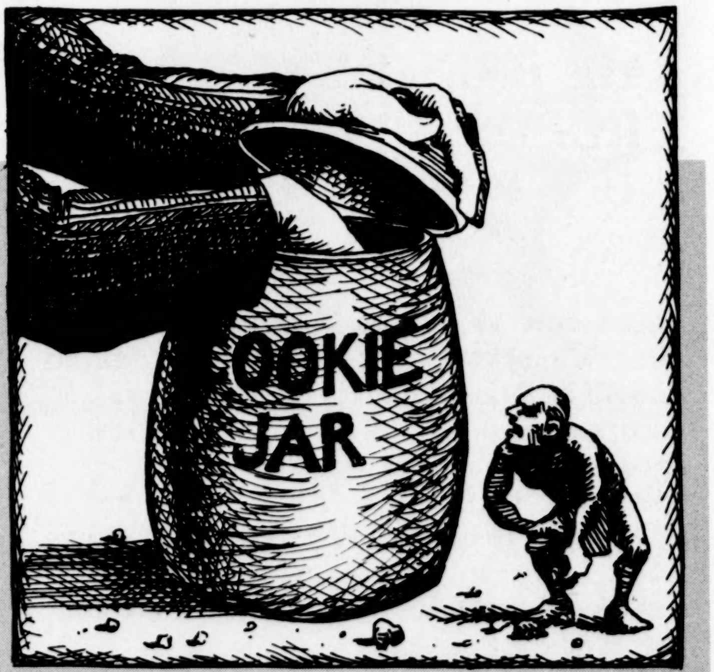
NO ONE WOULD PAY ANY TAXES IF WE FOLLOWED THE EXAMPLE OF THE U.S. ATTORNEY GENERAL

A *Wall Street Journal* headline reported as follows:

Attorney General Invested in Oil Venture after Warning IRS Bars Such Deductions

Attorney General William French Smith [the nation's top tax prosecutor] invested last year in an oil-drilling venture promising tax deductions of $4 for each dollar invested in 1981, despite a warning that the Internal Revenue Service disallows such deductions.

As the Justice Department represents the IRS in court when disputes over such issues are litigated, Mr. Smith would be in the unusual position of suing himself if the investment were challenged in court.



[Attorney General Smith's spokesman] Mr. DeCair of the Justice Department said Mr. Smith isn't an expert on tax law . . . . Asked if the Attorney General knew the venture's deductions were contrary to an IRS ruling, Mr. DeCair was *unable* to provide an answer.

**(*Wall Street Journal*,
May 13, 1982;
emphasis added)**

Wilson recently acknowledged that despite an income of $75,000 — or more than three times that of the average hardworking California family — he paid no federal income tax in 1980.

President Reagan's top tax prosecutor, Attorney General William French Smith, recently acknowledged that at the very time he became this nation's top tax prosecutor, he took federal deductions worth more than $160,000 for a questionable tax shelter that actually cost him just one-fourth that amount.

And some Americans may remember that in 1970, while governor of California, Ronald Reagan paid no state income tax.

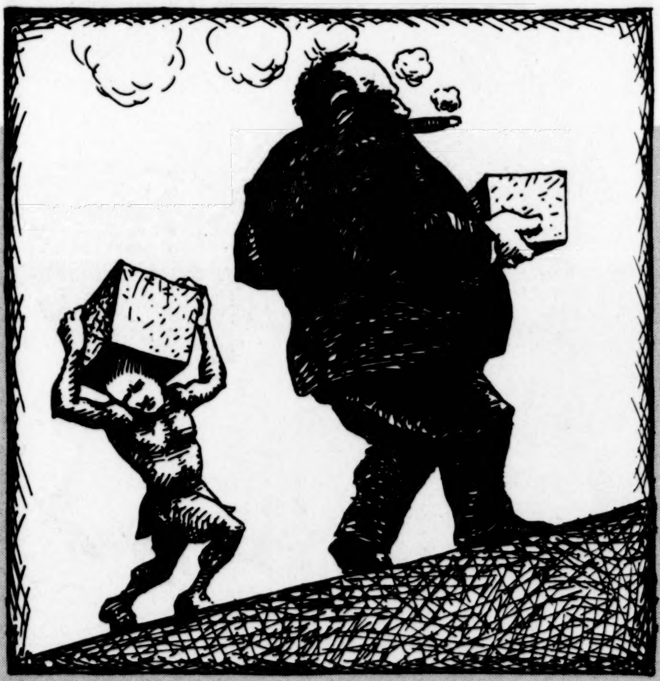
The simple tax would eliminate these inequities by ensuring that persons earning equal amounts of income pay equal amounts of tax, no matter how artful their tax attorneys may be.

Two-Hundred-Dollar Tax for Typical Family under Simple Tax

Under a California Simple Tax Initiative there would just be two tax rates for everyone. For example, for a couple, those rates would be 4 percent for all income up to $50,000 and 7 percent for all income above $50,000. (The present maximum is 11 percent.) Under the principle that "a rose is a rose is a rose," all income, no matter how ingeniously labeled, would be fully taxed, including capital gains. There would be only two exceptions:

1) The first $7500 of income per individual, $10,000 per head of household, and $15,000 per married couple would be excluded from tax in order to protect the poor and the vast majority of social-security recipients.

2) A $1000 deduction per dependent would be permitted.



ISN'T THE SIMPLE TAX IDENTICAL TO THE HOOVER INSTITUTION'S FLAT TAX?

("Trickle Up Vs. Trickle Down")

The most-discussed proposal for a federal flat tax comes from the Hoover Institution, a Ronald Reagan "think tank" that has been one of the leading advocates of supply-side economics. Unfortunately, its flat tax is a misnomer. It is not a true flat tax since it fails to consider the impact of the highly regressive 7 percent social-security tax, which is only levied on the first $35,000 of salary.

A person earning $35,000 under the 19 percent Hoover flat tax actually pays a 26 percent rate while the average chief executive of a major corporation (average earnings of $500,000) pays only a 19 percent rate for all income above $35,000.

Unlike the regressive Hoover tax, the author of this article has called for a federal simple tax with a two-tiered, progressive rate structure that gives full credit for the social-security tax. The federal simple tax also provides for a $15,000 exclusion for a married couple while the Hoover proposal permits an exclusion of only $6200.

The Hoover Institution's proposal appears to be predicted on the so-called "trickle-down" theory while the author's simple tax is based on the "trickle-up" concept. According to the author, "If there are to be any guinea pigs in the tax field, the poor and middle class should not be the laboratory specimens."

The California Simple Tax is modeled after the federal simple tax in that taxes for the majority of Californians will be reduced as will taxes for many well-to-do persons who presently do not benefit from tax gimmicks. However, wealthy persons who make extensive use of tax gimmicks and deductions will pay higher rates.

On a national level, the individual simple tax can be integrated with a substantial reduction in corporate rates from 46 percent to 25 percent, assuming the elimination of corporate tax gimmicks.

A typical family of four with the median California income of $22,000 would pay a California simple tax of just $200.

The governor of California, with a salary of approximately $50,000, would pay a state tax of $1320.

The chairman of Pacific Gas and Electric, the West's largest utility, with a listed salary of approximately $300,000, would pay a state tax of $18,800.

The fortunate citizen with annual earnings of $1 million would pay approximately $67,000 under a simple tax.

Example of Five-Line Postcard Simple Tax — Family of Four:

California Simple Tax — 1985

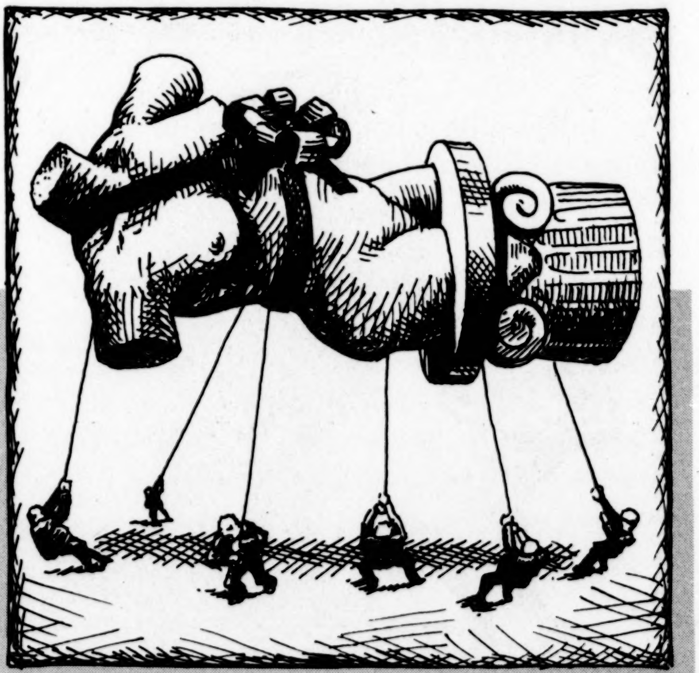
1. Total Income	$22,000
2. Income After Exclusions	5,000
$17,000 exclusion based on $15,000 per couple and $1000 per child	
3. Tax Withheld	200
4. Tax Due	
4% × $5000	200
5. Refund (Balance Due)	-0-

Simplifies Balanced Budgets

The major question raised is whether a simple or flat tax with a 7 percent maximum rate would raise sufficient revenue. It is estimated that in 1985, the earliest possible time by which the simple tax might be in effect, gross income in California could be an estimated $360 billion. This could generate $11 billion in tax revenue, even after substantial minimum exclusions for individuals and married persons.

Eleven billion dollars is approximately $4 billion more than was generated by California's income tax in 1981. This is more than enough to make up for the estimated $1.5 billion expected state deficit without need for an increase in the regressive sales tax.

Most important, in terms of balancing future



WHAT ABOUT HOME-MORTGAGE, CHARITABLE, AND MEDICAL DEDUCTIONS UNDER A SIMPLE TAX?

The advantages of deductions are generally quite modest on a state level. In any event, they are outweighed by the simple tax's lower tax rate, lack of paperwork and simplicity.

MORTGAGE:

The advantages of the mortgage-interest deduction are often quite modest. A typical Californian with $5000 in interest deductions receives a mere $200 in tax benefits (based on 4 percent tax rate). More important, home interest deductions are counterproductive and inefficient. They:

a) discourage the building of rental units (thereby producing a scarcity in rental units);

b) encourage conversion of rental units to condominiums; and

c) penalize first-time homebuyers since housing prices are artifically inflated as a result of the heavy federal-interest deduction.

CHARITABLE:

The typical Californian gives less than $700 in charitable deductions per year. At a 4 percent tax rate, this saves him/her $28, or the cost of two tanks of gas.

Few institutions, even including art museums, would be adversely affected by the elimination of charitable deductions. For example, a recent IRS report (*Wall Street Journal*, March 2, 1983) showed that of 468 art donations, over $103 million was claimed in federal tax credits. However, an independent art panel subsequently determined that the paintings were worth only $702 *thousand*, or less than 1 percent of the amount claimed.

MEDICAL:

For those few persons who incur catastrophic medical costs, the only cost-effective solution is guaranteed catastrophic health insurance as provided by virtually every other industrial nation.

state budgets, a simple tax is an effective method for fine-tuning the economy. Minor and very simple adjustments in the tax rate will enable the government to precisely balance the budget. For example, in California even a trivial increase, such as a one-tenth-of-one-percent rate increase, will generate a minimum of $300 million. And

THE IRS AS AN OMNIPRESENT FORCE

The Internal Revenue Service has an annual budget of $2.5 billion and employs 88,000 persons.

In 1981, it received 167 million returns and collected more than 645 million taxpayer documents in order to futilely ensure the integrity of our tax system.

Overall, the IRS has 420 different forms. Almost half (41.98 percent) of total federal paperwork is generated by the IRS.

In 1982, the complexity of the system caused 40.3 million taxpayers to secure outside assistance to fill out their tax forms. (Almost two-thirds — 61 percent — of taxpayers using the long form, 1040, sought such outside assistance, and even the short form required outside assistance by 7.5 million taxpayers.)

The incomprehensible nature of the individual income tax is illustrated by a 1981 IRS statistic relating to verification of *arithmetic* on 91 million individual returns. The IRS admitted that 3.2 million taxpayers, according to its computers, inadvertently *overpaid* their tax bills by $778 million, or an average of $242 per return. In addition, 3.9 million taxpayers inadvertently understated their tax liability by an average of $315 per return.

Besides computer verification of arithmetic, the IRS examined 1.8 percent of individual and corporate returns (1.9 million). It recommended additional taxes and penalties of $10.5 *billion*.

DEDUCTING BUSINESS LITIGATION — OR WHY L.A. HAS MORE JUDGES THAN ALL OF ENGLAND

Tax deductions, even when they appear reasonable and highly meritorious, often have major, unforeseen consequences.

The business litigation deduction is an example. Any business may deduct its litigation expenses. As a result, taxpayers pay for or subsidize approximately half of all business litigation costs, even when such litigation is directed against taxpayers and despite the fact that most taxpayers are denied the right to deduct their own litigation expenses.

Last year such inadvertent and unpublicized taxpayer subsidies of business litigation reduced our federal revenues by $3.7 billion.

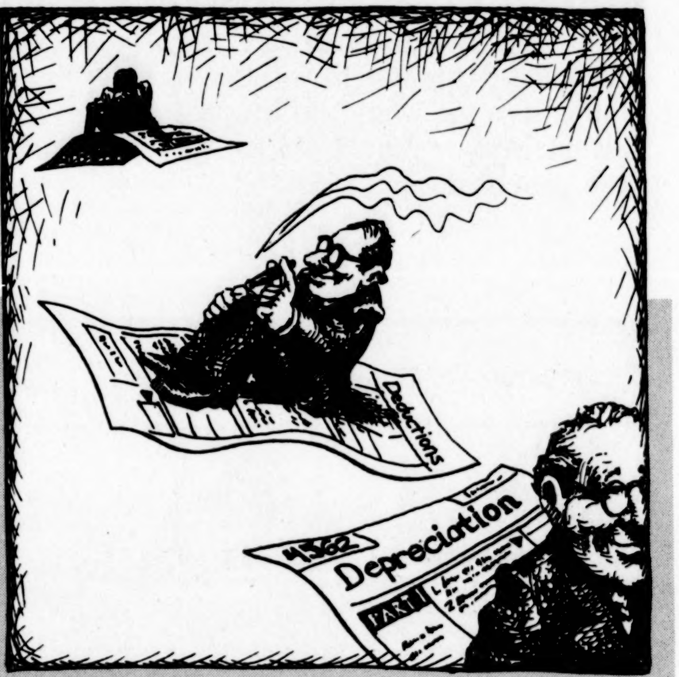
Except for business interests, no one else, no matter how meritorious his/her litigation, is eligible for a taxpayer subsidy. Tenants who sue their landlords for defective housing, consumers who sue giant corporations for pesticide damage, women who sue corporations for employment discrimination,

each three-tenths-of-one-percent increase will generate approximately $1 billion in additional revenue.

In addition to balancing the budget and elminating a costly, grossly ineffective, paper-logged administrative system, there are many fundamental reasons why a simple tax on a postcard is best for California and America:

— The debate about who pays how much to support a particular level and quality of government, such as good or poor schools, should be right out in front of the people, not hidden behind an incomprehensible labyrinth of tax-code clauses.

— The majority of Americans should not be dependent on outside assistance to understand or complete their most important



SOME WEALTHY AND ALL ELEPHANTS PAY THE SAME AMOUNT OF TAXES

Almost two hundred (198) elite families with *reported* incomes from a quarter of a million to over one million dollars paid no federal income taxes in 1980, according to official IRS reports.

This is only the tip of the iceberg. The IRS failed to include the multithousands of high-income people with large investments in tax-free state and local bonds. Income from tax-free bonds need not be reported to the IRS, although, for example, unemployment insurance payments must be reported.

Thus, any millionaire who is not on unemployment insurance and wishes to avoid detection as a millionaire can readily do so by investing in tax-free bonds. Interestingly, eight persons with reported *income* of $1 million or more drew unemployment compensation in 1980.

These statistics are not aberrational. According to the Brookings Institute, the average effective federal tax rate for persons earning over $1 million is a mere 17.7 percent; this is down from 27.9 percent in 1976.

or disabled individuals who sue insurance companies as a result of automobile accidents are not eligible for tax deductions.

Thus, the small individual confronts not only a well-paid array of corporate attorneys, but an array compensated in large measure by the taxpayers.

The inherent unfairness of a subsidy to only one side in litigation is compounded by the fact that these taxpayer subsidies encourage excessive and lengthy business litigation that should be settled out of court. The result is that our courtrooms are so crowded that, for example, Los Angeles courts, despite having more judges (over 230) than all of England, require personal-injury litigants to wait up to five years before they go to trial.

The California Judicial Council statistics for 1980 show that 43 percent of all *civil* court *time* in California relates to litigation primarily between businesses. One hundred and seventy-eight fewer superior-court judges would be necessary if such litigation were eliminated.

The Reagan Administration has refused to take any action despite a class-action petition filed with the Office of Management and Budget. It has refused despite the fact that this $3.7 billion loss of revenue exceeds the $3 billion in cost reductions secured by the administration's cutbacks in school lunch, food stamp and pregnant women's nutrition programs.

California State Senator Alfred A. Alquist is considering sponsoring a California bill to eliminate all business litigation deductions above $15,000 per year. This would generate $96 million in additional state revenue. (Please note that all other business *legal* costs except litigation would remain deductible.)

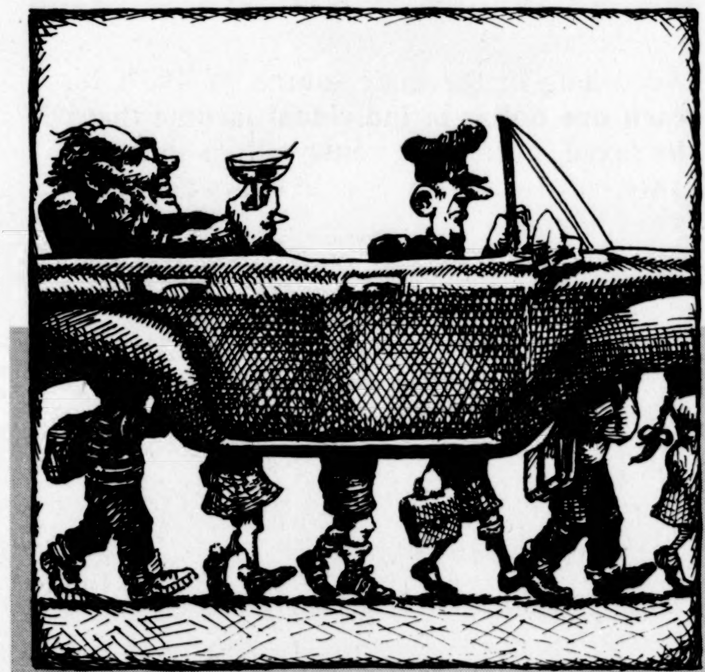
annual document. (Last year 61 percent of all Americans paid for outside assistance for their federal tax form 1040; in addition, 7.5 million Americans sought such assistance despite completing the allegedly simple short form, 1040A.)

— Due to the simplicity of the tax, those who can afford to purchase lobbyists to manipulate our system without scruples or public scrutiny would no longer have an advantage over the 95 percent of Americans who cannot do so.

"Common Sense" Government and National Model

Equally important, at least for those of us who abhor federal bureaucracies and biases, is that under a simple tax state governments would no longer have their revenue expectations dictated by Washington. That is, since many state tax structures are inextricably tied into the federal tax structure, Washington, in effect, manipulates state governments.

As California Governor Deukmejian said in his 1983 inaugural address, the people want a "common sense" government. The simple tax, in which all pay an understood and agreed on fair share and no one is able to carve out special inequitable preferences, may be a first step in giving the people a "common sense" government in which the vast majority



THERE MAY BE NO FREE LUNCHES BUT THERE ARE FREE ROLLS ROYCES

Even seemingly innocuous deductions often are more costly and counterproductive than anyone might imagine.

The so-called "Rolls Royce" or luxury-auto deduction is such an example. According to the IRS and knowledgeable CPAs (*USA TODAY*, March 7, 1983), the improper or fraudulent treatment of luxury automobiles ($20,000 and above) as a business deduction when the automobile is used primarily for pleasure costs taxpayers an estimated $4.5 billion per annum.

The Rolls Royce tax deductions are a perfect example of the less-than-effective and counterproductive operation of our tax system. The lowest priced Rolls Royce sells for $110,000. It is foreign built. It has the worst gas mileage of any sedan sold in the United States. Yet, over a three-year period, as a result of artificial depreciation deductions and investment tax credits, the purchaser of a Rolls Royce who claims it for business will receive a rebate from the taxpayers of two-thirds of the price. (A $75,000 rebate on a $110,000 auto reduces the actual cost to $35,000.)

The Rolls Royce, however, does not actually depreciate. It generally appreciates in value. Thus, after three years, the Rolls Royce that cost in effect only $35,000 can be sold for $110,000. The profit is $75,000, minus taxes due as a result of this profit.

The bitter irony is that while the present administration continues its all-out campaign against welfare cheating by the poor and disabled (such as the campaign against four million disabled and elderly on SSI), the IRS not only ignores but encourages a far more extensive and expensive form of cheating among the so-called leaders who drive the Mercedeses and Rolls Royces of the world.

A tax analysis of how a $110,000 Rolls Royce can be bought for $35,000 is set forth below.

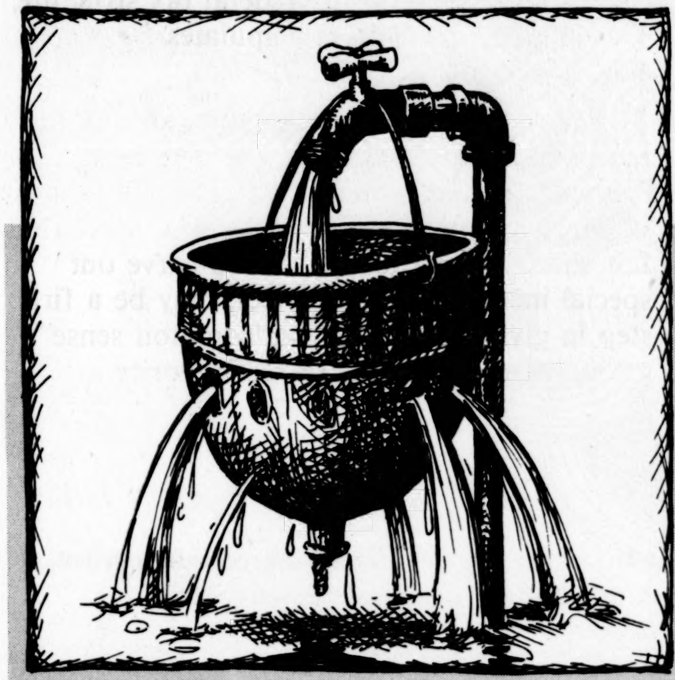
VALUE OF TAX BENEFITS

Fed. Investment Tax Credit	**$ 3,630**
3-Year Federal Depreciation	**55,000**
Sales Tax Deduction	**3,300**
Total Fed. Subsidy	**$61,930**
State of California Tax Benefits	**12,826**
Total Fed. and State Subsidy	**$74,756**
Actual Cost of $110,000 Rolls	**$35,244**

understands and controls its financial and, perhaps, political destiny.

California has been a pioneer in energy, nuclear power resistance, and a host of other ideas that have eventually, and often quickly, swept the nation. It is therefore quite likely that the California Simple Tax could be the forerunner of simple taxes in other states, particularly in approximately two dozen states where an initiative process is operative.

Such a response on a state level could well trigger a *federal* simple tax, as well as an interrelated simple and substantially reduced corporate and business tax by the end of this decade. The result would be a people once again in command of its destiny, respectful of its government, and, for the first time in three score and ten years, literate in regard to a combined federal, state and local tax system that generates almost $1 trillion in revenue per annum, or $12,000 per family. ■



A FAIR TAX SYSTEM CAN MEAN A BALANCED BUDGET

Deficit spending, or an unbalanced budget, is not necessarily caused by excessive welfare or defense spending. It is estimated that by 1987 $500 billion in federal taxes will be uncollected as a result of non-reporting and tax gimmicks or deductions.

By 1987, according to the Brookings Institute and Citizens for Tax Justice, for each dollar of corporate profits that will be taxed, $1.88 will go untaxed. This will result in a loss of more than $100 billion in revenue.

According to the same source, by 1987, for each one dollar in individual income that will be taxed, at least 71 cents will go untaxed. This will result in a loss of more than $280 billion.

In addition, according to the IRS, it is estimated that by 1985 the combination of unreported income (underground economy) and false deductions will cause a loss of $120 billion.

1987 POTENTIAL REVENUE IF ALL INCOME WERE REPORTED AND TAXED

Corporate	**$100 Billion**
Individual	
(Not including underground)	**280 Billion**
Underground Economy	**120 Billion**
Total	**$500 Billion**

This $500 billion in additional tax revenue would, of course, balance the budget, avoid cutbacks in social programs, eliminate the need for so-called social-security reforms, and alter our national security strategy.

Is this $500 billion estimate of additional revenues realistic? Yes, since it is the equivalent of only 10 percent of the projected $5.038 *trillion* U.S. gross national product by 1987.

WHAT TO DO

It is unlikely that any legislature dominated by million-dollar special interests will voluntarily eliminate a system that is a major source of campaign funds. A number of people are proposing as a first step a Simple Tax Initiative for 1984 in California. If you are interested in participating, or want information on how to produce a simple tax in other states, write to:

Simple Tax
3020 Bridgeway
Suite 166
Sausalito, CA 94965

Do *not* send money, just your ideas, talents, and interest. The California campaign could begin in June 1983.

Barbarians and Empire

by Frederick Fuller

Calligraphy by Rebecca Wilson

THE DRUIDS, THAMES & HUDSON (1968)

The Heroic Gaul, a Belgian statue from the nineteenth century.

A LOT OF WHAT'S BEEN GOING ON IN **CoEvolution** lately has involved looking at folk cultures and primitive tribal societies. They've been examined as alternatives to modern mass culture and as guides to living gently on the Earth. Bioregionalism, self-reliance, anarchism, pantheism, potlatching, and ecological thinking all relate to this. But we who are children of Europe do not need to look solely to isolated hunters and gatherers for a way of life that respects Nature, nor solely to the East for a cosmic mysticism. We have a similar tribal past that is not really so distant — less than two thousand years, often much less. The "Barbarians" of northern Europe, like the Native Americans, had a rich and complex tribal culture long before they were "civilized" by the empires of the Mediterranean.

In the Summer '82 **CQ**, Michael Phillips made a foray into ancient history with his article, "White America Is Predominantly a Viking Culture." He proposed that the well-known term *Vikings* could be applied to all the early Germanic

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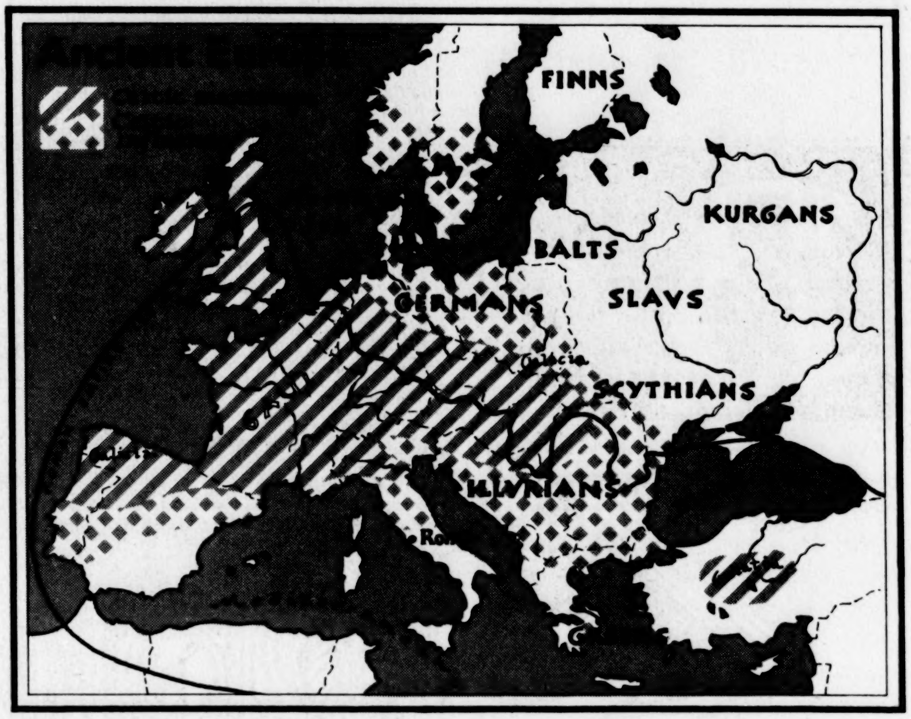
*This decidedly qualifies as the most ambitious letter-to-the-editor we've ever run. Fuller responds to Michael Phillips' provocative article, "White America is Predominantly a Viking Culture" (*CQ*, Summer 1982), by completely swallowing it and turning it from whale food into whale.*

I am fascinated by this tale of the untold side of our heritage. They say history is written by the winners. More likely history is written by the writers. They say civilization is what happens in cities. You could also say empire is what happens in cities. And barbarians are what happen to cities. Each of us contains not only multitudes, but hordes, and the honor of the steppes and deserts and mountains.

Afghanistan. Alexander; Soviet Union. This barbarian vs. empire dialectic goes a long way back and shows no signs of stopping.

Frederic Fuller, 30, is a freelance writer living in Williamston, Michigan. *—Stewart Brand* people because their culture was similar to, and a precursor of, the Scandinavians of 800-1100 A.D., who are traditionally called Vikings. He theorized that because these "Vikings" dominated Europe after the fall of Rome, and because a majority of white immigrants to America came from Viking areas, we are largely Viking heirs — linguistically, genetically, politically, socially. He found both good and bad in this heritage: the roots of our individualism and democracy, but also imperialism, slavery, and violence.



DON RYAN

Dark shading shows the range of Celtic culture at its peak. Lighter shading shows the wider area of Celtic influence. Modern nations are shown by broken lines.

I don't entirely disagree with Phillips, especially if I can substitute the label "Barbarians" for "Vikings," but I think he oversimplified things. The history of Europe is dauntingly complex. For thousands of years there have been invasions and migrations by so many different peoples that it is hard to generalize about any of it. Any talk in terms of ancient racial strains is invalid because Europe has been a huge melting pot since long before written history. Still, we can generalize about major cultures if we recognize there are no sharp lines dividing them. Language often serves as a distinct cultural tag, but it shows only one dimension of a culture.

I'd like to add a different perspective to what Phillips wrote, and to make a deeper foray into ancient Europe. Phillips made little mention of the Celts, one of the major peoples of Europe. Indeed, they have been called "the founders of Europe." Celtic influence is still strong and I believe it provides an alternative to the imperialistic, mechanistic, Earth-raping aspect of Western culture. I think that the imperialism of Europe, at least in the sense of a centralized, bureaucratic conquering machine, does not stem from our Barbarian or Viking heritage as Phillips implied, but from an urban Eastern tradition, via the great empires like Rome.

The Barbarian history of Europe is not very easy to sort out because the Barbarians themselves left no written history. Most of what we know about them comes from the pens of their civilized enemies, the Greeks and the Romans. The Greeks originally called all foreigners "barbarians" in imitation of their unintelligible speech: "bar-bar" or babble. (It wasn't Greek to them.) I use the term, "Barbarians," to mean the uncivilized tribal groups north of the Mediterranean. These people all had egalitarian tribal societies and polytheistic Nature-worshipping religions. They spoke various languages but they shared many cultural traits. All Germans were not Vikings, but both Vikings and Germans were Barbarians, as were Celts and Slavs and another very important ancient people, the Scythians. All these peoples may have had common roots in a hypothetical prehistoric people known as the Indo-Europeans.

Phillips raised an important subject. Our Barbarian heritage has been too long ignored. Most history books still teach that Western culture began with Greece and Rome and the Near East civilizations. This is as much a distortion of the truth as what our schoolbooks also used to teach: that American history began only when the white men came here and civilized the savages. History is a matter of interpretation and for too long it has been interpreted by academicians who are biased in favor of the great empires because they were "civilized" and literate. Many of our most cherished traditions are really Barbarian — such as political freedom and democracy. "Greek democracy," acknowledges the **Encyclopedia Britannica,** "was a brief historical episode that had little direct influence on the theory and practice of modern states . . . . Modern democratic ideas were shaped to a large extent by medieval ideas and institutions . . . ." And these medieval ideas and institutions were mostly Barbarian. The thinkers of the Enlightenment and the U.S. founding fathers identified with Greece and Rome because that was the only *written* history with which they recognized affinity. They hailed Greece and Rome as precedents, but the spark for democracy was indigenous tradition. Actually, republican eras of Greece and Rome probably evolved out of their own Barbarian roots.

Phillips, in his article, gave an account of Germanic history which began with the tribes who lived around the North and Baltic Seas in the first few centuries B.C. I will begin with a brief history of the Celts, who arose farther south and somewhat earlier.

The Celts

The Celts arose from a mixture of races and earlier agrarian cultures in the highlands north and west of the Alps. They are recognized by archeologists as having a distinct culture and language in the early Iron Age, circa 700 B.C., a century before the time of classical Greece and when Rome was just a village of mud huts. In the fourth century B.C., a Greek, Ephorus, listed the "Keltoi" as one of the four great barbarian peoples in the known world. The others were the Libyans, the Persians, and the Scythians.

The Celts were also called Galli, Galatae, and Gauls. Their heartland was called Gaul by the Romans. The names of Celtic tribes and gods are preserved in place names like Bohemia, Helvetia, Paris, Vienna, the Thames and the Rhine — from Galicia, Spain, to Galicia, Poland. At its peak, from 500-50 B.C., Celtic culture spread all across Europe, yet it was not an empire. The Celts were stubbornly tribal and rural, and were never unified. They built no cities, though important chieftains sometimes established hill forts and tribal centers.

ANCIENT EUROPE, ALDINE (1965)

Evidence of Celtic influence in Scandinavia: a panel from a silver cauldron found at Gundestrup in Jutland, Denmark, and dated approximately 200 B.C. Similar silverwork has been found in Rumania and Bulgaria.

Celts lived mostly in clan farmsteads built of logs, earth, and thatch. They worshipped nature deities in groves of oaks. Trees, rivers, springs, and animals were sacred to them. Celtic shaman/sages were called "Druids," which may mean "knowing the oak" or "thrice wise." Celts counted time by nights instead of days, winters instead of summers, and they were inclined toward the mystical, the passionate, and the intuitive. They prized oratory, poetry, and music. Their "bards" (a Celtic word) preserved a rich oral tradition of history and myth. Fabulous, distinctive art is a hallmark of Celtic culture. It decorated everything they made.

The Celts also had practical genius. They excelled at mining, metalworking, and agriculture. Many inventions and innovations of the Iron Age came from Gaul: iron plowshares, wheeled harvesters, crop rotation,

DIE WELT DER KELTEN

Bronze statue of Celtic dancing girl, ritually naked. Found in Loiret, France, south of Paris; dated circa 100 A.D.

Celtic Women

ELABORATE graves of Celtic women have been discovered, suggesting women could attain a high status in Celtic society. In the Celtic law preserved in Ireland, women could hold their own property even after marriage, could choose their own husbands, and if the wife's property exceeded the husband's, she could govern the household without his interference. She could divorce and keep her property.

The Celts had female deities galore. Most were Earth goddesses like Brigantia (or Brigid), deity of flocks, fertility, and poetry. But some, like the Irish goddess Morrigan, were deities of battle as well as fertility. Brigantia had sisters who were goddesses of smithcraft and law.

Powerful feminine deities were often associated with rivers and springs, which were believed to have healing powers. The goddess Danu was the head of a whole tribe of deities in Ireland and is thought to have given her name to the Danube River on the Continent. The Marne River derives from Matrona, "The Mother." The goddess Sequanna was worshipped at the source of the Seine.

Epona, a goddess of horses and travelers, was widely worshipped in Gaul. She had counterparts named Rhiannon and Macha among the Welsh and the Irish.

fertilizer, horseshoes, chain armor. The Celts taught the Greeks and Romans to use soap and they improved upon the rotary flour mill and the war chariot. Most of the basic metal hand tools we use today were developed or refined by the Celts. The iron-tired, wooden-spoked wagon wheel they perfected remained little changed up to the age of the automobile.

The Celts were renowned horsemen as well as charioteers. The horse held a revered place in their society. Horse-riding Celtic warriors wore trousers and plaid cloaks, had long wild hair, mustaches, and beards, all of which made them quite distinct from the clean-cut and coolly rational Romans. The Celts were well-known to the classical world through both trade and conflict. About 390 B.C. Celtic tribes sacked early Rome and in 279 B.C., Celts pillaged Delphi in Greece. The writers of Greece and Rome were appalled by the ferocious appearance of the Celts and by their intemperance in drinking, fighting, and boasting. Yet many of these writers also described them as honest, chivalrous, and generous.

NATIONAL MUSEUM OF ANTIQUITIES OF SCOTLAND, EDINBURGH

This bronze headpiece for a horse is a fine example of Celtic armor. Note the scrolling which changes into stylized bird heads. Probably second century B.C.

The Celtic realm was not often peaceful. The price of tribalism was frequent battling and the Celts were accused, at least by their Greek and Roman enemies, of being madly fond of war, of making bloody human sacrifices, and of collecting the heads of foes. But the Celts were no match for the Roman military machine commanded by Julius Caesar, who gathered the political power to become dictator of Rome by conquering Gaul. The Celtic style of warfare emphasized individual combat and heroic charges. It was not organized. Battles between tribes were often decided by the ritual combat of two champions. Caesar's conquest of Gaul can be compared to the slaughter of the American Indians. When it was over, in 51 B.C., the Celtic heartland was subjugated and the Roman Empire spread through most of western Europe. Rebellions were crushed. Britain was conquered in the first century A.D. The remains of Celtic culture were further eclipsed by the expansion of the Germanic tribes and other Barbarians.

Celtic culture and language have survived till recent times only in the rugged fringes of western Europe: Ireland, Scotland, Wales, Cornwall, Cumberland, Isle of Man, Brittany in France, Wallonie in Belgium, Galicia in Spain. But Celtic traditions also underlie many other cultures where the language has been supplanted, especially in England and France. Many people there still celebrate a Celtic heritage. Furthermore, Celtic monks and Celtic myths helped to shape the Europe of the Middle Ages. During the so-called "Dark Ages" (400-800 A.D.) that followed Rome's decline, Celtic Britain and Ireland were beacons of learning and culture. After their conversion to Christianity, these islands had developed a distinctly Celtic kind of Church, centered on rural monasteries. There monks preserved artistic and scholastic traditions, transferring even pagan lore to paper. One group of Celtic legends transcribed by the monks, that of King Arthur and his knights, had a profound effect on European society. In the sixth century, many Celtic monks and pilgrims began going to the Continent, establishing monasteries and spreading their artistry and learning.

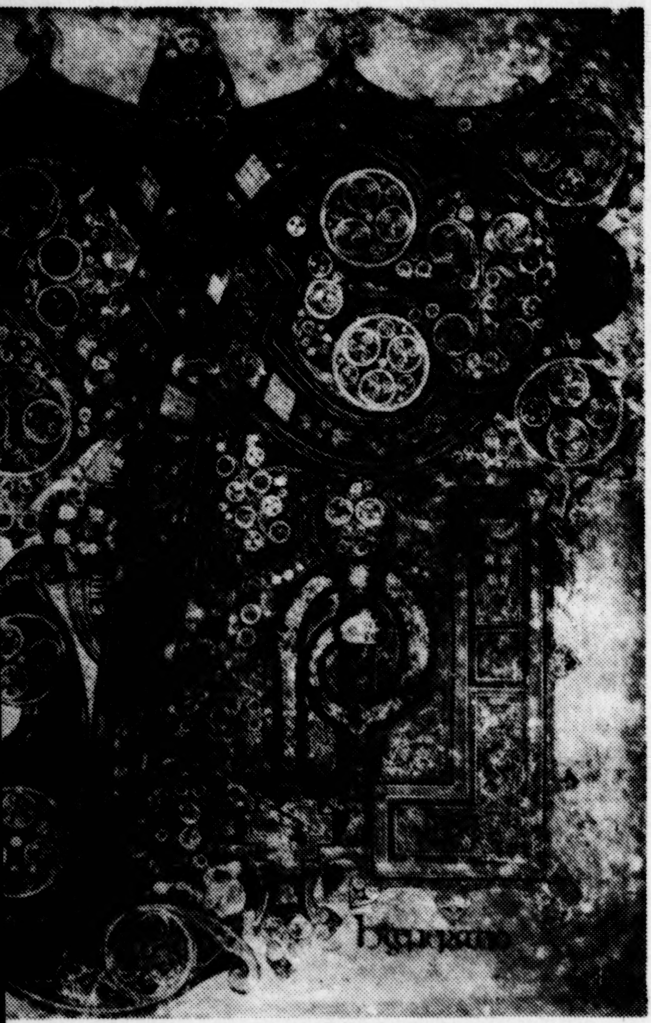
Independent Celtic Christians clashed with the hierarchical Church of Rome. Among other things, the bishops of Rome admonished the Celts for allowing women to perform

She was always portrayed on horseback and sometimes naked, with long tresses. The legend of Lady Godiva may represent a survival of her cult.

The legendary leader of West Ireland was a woman, Queen Mebh. She had a real-life counterpart in Britain: Boudicca, of the Celtic tribe, Iceni. Boudicca led a revolt against the Romans in 60 A.D. and burned the Roman fort, London, before the uprising was crushed. A Roman writer, Dio Cassius, described Boudicca as "huge of frame and terrifying of aspect, with a harsh voice. A great mass of bright red hair fell to her knees." A Greek, Diodorus Siculus, wrote: "Gallic women are not only equal to their husbands in stature but rival them in strength as well." Women frequently fought with men in battle. Joan of Arc may have had Celtic roots.

Grainne Ni Mhaille (Grace O'Malley) was a powerful Irish sea captain in the 1500s. Her exploits as a pirate became legendary in Ireland. The historical record shows she visited Queen Elizabeth of England in 1593 to discuss the politics of West Ireland. In the eighteenth century, an Irish-American pirate named Anne Bonney was famed in the Carolinas for her "fierce and courageous temper." She was captured in a sea battle near Jamaica in 1720, but escaped hanging on grounds of pregnancy.

Britain has a long tradition of female leaders. Two of its greatest eras, the Elizabethan and the Victorian, are named for women who presided over them. At present, of course, Britain has two women leaders — one figurative and one authentic.



THE STORY OF WRITING, TAPLINGER (1981)

The letters *chi-rho* from a page of the Book of Kells, c. 800 A.D. Like the other great illuminated gospels — the Book of Durrow and the Lindisfarne Gospels — it was made at a Celtic monastery.

priestly duties. A Celtic monk named Pelagius typified the independent spirit of Celtic Christianity. He preached against the doctrine of original sin and suggested that Christians could attain grace through the exercise of free will. He was branded a heretic in 416 A.D. Roman orthodoxy eventually triumphed and became catholic in Europe by organizing itself along the lines of the Empire from which it sprang.

Celts & Germans

Celtic culture and Germanic culture are traditionally seen as a dichotomy. The Catholic Celts in northern Ireland feel they are still fighting Germanic England. In light of Nazis and Vikings, it is tempting to portray Germans as cold, cruel, efficient, prone to authoritarianism and oppression; while Celts, as typified by the jovial Irishman, are easygoing and undisciplined. Two historians at the University of Alabama, Grady McWhiney and Forrest McDonald, have interpreted the American Civil War as a conflict between the industrious Anglo-Saxon North and the intractable, pastoral Celtic South.

A certain rivalry is indeed ancient, but the more one reads about early Germanic and Celtic cultures, the more similarities one sees between them. The classical writers had a great deal of trouble distinguishing between the Germans and the Celts. They found them similar in physical appearance and in behavior. For political expediency, Julius Caesar labeled all the people northeast of the Rhine "Germans" and those south and west of the Rhine "Gauls." That labeling stuck, regardless of language. The lower Rhine became the border of the Roman Empire. Modern historians still argue, as did Roman writers, about whether two northern tribes, the Cimbri and the Teutones, were Celtic or German. They were important because their wandering raids on both Celts and Romans sparked the instability in Gaul that led to Caesar's Gallic Wars. Caesar called them Germans because the Cimbri came out of Jutland. But the names of their leaders were Celtic and they seem to have spoken Celtic. Perhaps they were a hybrid. In any case, they serve to demonstrate how similar these peoples were. Ironically, both the original "Teutons" and another tribe, the first to be known by the name "Germani," may have spoken Celtic.

In 98 A.D. the Roman Tacitus published a book about the Germanic people. The culture he described was very similar to that of the earlier Celts. The Germans were farmers and stockherders and they lived in kindred groups like clans. Chieftains were elected and their power was subject to a tribal assembly. Poets preserved tribal tradition and history in ancient songs. Nature deities were worshipped with sacrifices in groves of trees.

Both Celtic and Germanic societies seem to have had a warrior aristocracy from which the chieftains were chosen, while the majority of people were free commoners. The men of the warrior class were accorded greater prestige than the commoners but few special privileges, and this aristocracy could be entered by merit as well as by birth. The Celts and the Germans sometimes had slaves, who were probably war captives, but slavery was not a building block of society as it was among the Mediterranean civilizations.

Celts and Germans were equally fond of battle and they had myths and codes that sustained them in their constant adventuring and proximity to death. A tradition that seems to have existed outside the regular structure of society is called "comitatus" in reference to the Germans and "clientism" in regards to the Celts. It began with the mounting of war bands for raiding. Warriors would voluntarily pledge loyalty to one leader for the duration of a foray and in return would expect a share of the spoils. Through the centuries this oath of fealty led more and more to permanent bonds, and under Roman influence it became institutionalized as feudalism.

The main difference between the Celts and the Germans may have been one of cultural advancement. The German-speaking people, at the northern edge of Europe, were relatively primitive when Celtic culture was at its peak. Caesar did not think it necessary to conquer them. The German tribes rose to prominence only after Gaul was destroyed, and the real German migration period, the "Volkwanderung," came centuries after, circa 400 A.D. This was when the "furor Teutonicus" overran the Roman Empire, when such tribes as the Goths, Vandals, Franks, Angles, and Saxons began their domination of Europe that lasted throughout the Middle Ages. The Viking era began even later, about 800 A.D. Thus, in some ways, the Celts, Germans, and Vikings represent *successive* cultures.

For hundreds of years, the Germanic tribes were culturally dependent on the Celts (who had learned from earlier cultures themselves). Ironworking came late to the Germans because they had found no source of ore, and it came from the Celts, as did their word for iron. Many such culture-words in German are of Celtic origin. Much Celtic art has been found in Scandinavia. Some of it may have been taken there as booty, but some artifacts must have been produced there by Celts — such as a stone slab found at Tommerby, in north Jutland, Denmark, which bears the Gallic inscription for Lugos, a Celtic god. Early Celts must have made many incursions into Scandinavia, and after the Gallic Wars the North Sea region must have absorbed many Celtic refugees. Charles H. Seaholm, in his book, **The Kelts and the Vikings*** writes that in the Scania region of southern Sweden where he grew up, the common folk kept alive bits and pieces of a strange language. He believes it was Celtic. The Scania folk would say of a rough, brawling character, "he fights like a *keltring*." This Celtic influence in the North is not much written about, particularly by Anglo-Saxon and German scholars who have always liked to think of Scandinavia as the untainted Germanic "Womb of Nations."

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Religion

Barbarian religions, in their true depth and integrity, are lost forever. They were long ago replaced by Christianity. We can only guess at what they were like by piecing together the evidence from archeology, from surviving folklore, from oral myths written down in the Middle Ages, and from what the Greeks and Romans wrote. We can also assume that they resembled other polytheistic nature-oriented religions like those of Native Americans and like Hinduism.

Both the early Germans and the Celts seem to have had a spectrum of localized deities. Each tribe had its own gods and goddesses, though some deities may have been common to all the tribes. Over three hundred different names of Celtic deities have been recorded. There was no uniform pantheon like that which the Greeks and Romans developed. Celtic and Germanic myths and deities often overlapped. The worship of Odin is thought to have been introduced into Scandinavia by Celts during the early Iron Age. Elves and dwarfs of Germanic myth are similar to the fairies and leprechauns of Celtic legend.

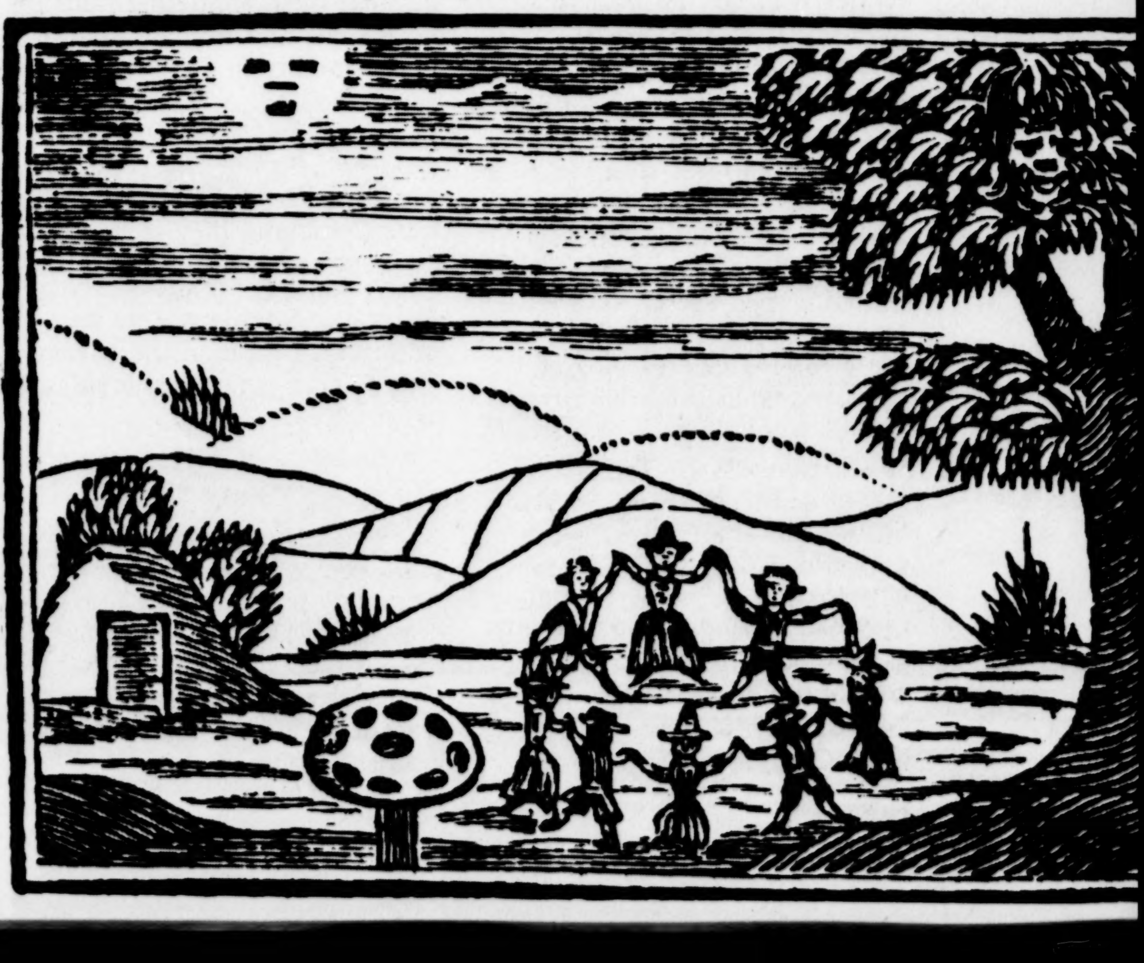
The Celts believed strongly in an Otherworld beyond death. The Irish imagined it as underground or in islands west beyond the sea. It was a "Delightful Plain" where sickness, death, and pain did not exist. There is evidence that some Celts believed in reincarnation. Germanic religion seems to have been more pessimistic, at least in the myths that have survived. There was glory in a warrior's death, but also doom. And the world was destined to end in a final cataclysmic battle of the gods, "Ragnarok."

There is not much evidence concerning Germanic holy days. There were undoubtedly seasonal festivals. Tacitus mentioned that the Germans observed three seasons: winter, spring, and summer. In Viking Scandinavia, the great festivals of the year were Yule and Midsummer's Day.

Halloween represents the strongest survival of pagan Celtic religion. It was the hallowed eve of Samhain. (All Celtic feasts began on their eve.) It was the beginning of the Celtic year, a time of tribal assembly at the sacred sites, a solemn night of bonfires and magic that looked toward winter and remembered the dead whose spirits roamed forth that eve from the Otherworld. The other great Celtic feast was Beltane, the joyous and lusty rite of spring, about May 1. Imbolc (February 1) and Lugnasad (August 1) further divided the year.

There was one profound difference between the Celts and the Germans — the Druids. While some German tribes had pagan priests, German chieftains often held religious authority as well as political. In their scope

Dance of Fairies, from an old English chapbook.



THE MAGIC ARTS IN CELTIC BRITAIN, RIDER (1945)

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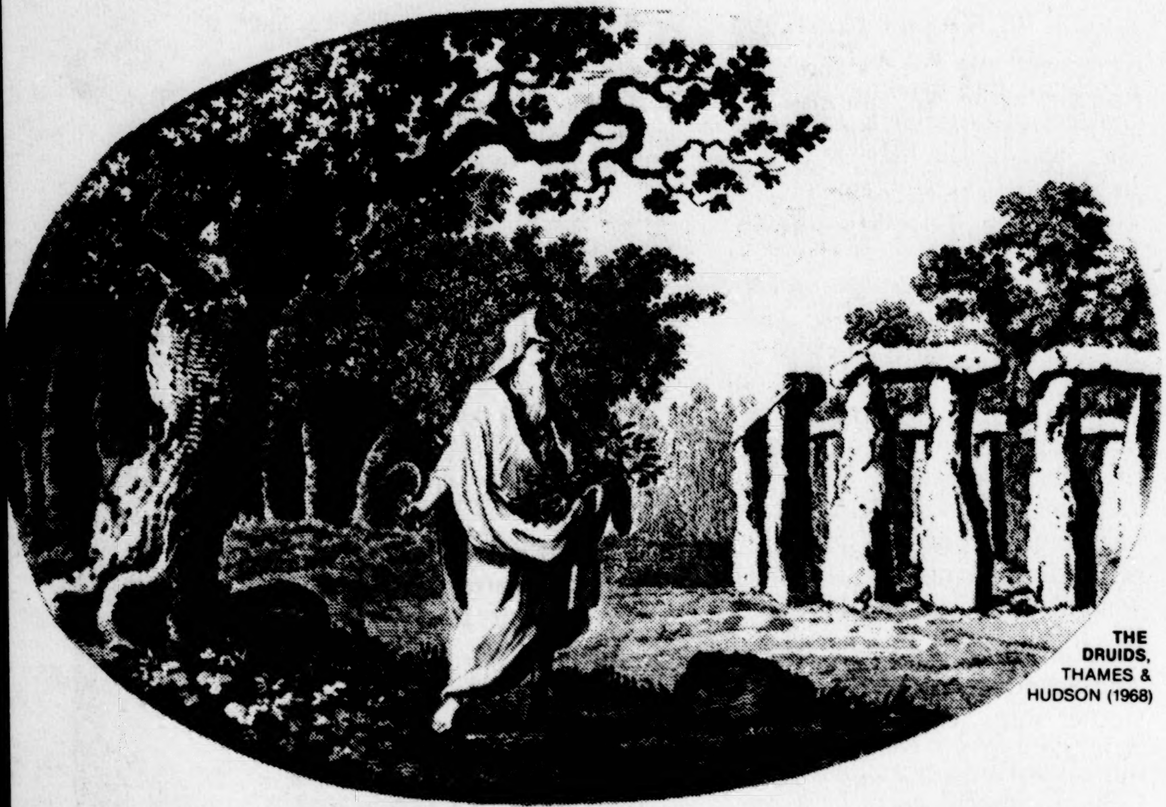
*1974, 450 pp., $10 postpaid from Philosophical Library, 200 West 57th Street, New York, NY 10019.



THE DRUIDS, THAMES & HUDSON (1968)

A romantic eighteenth century depiction of a Druid in a grove, complete with sickle, mistletoe, and Stonehenge.

and power, the Druids seem to have been uniquely Celtic. They were not just priests, but a blend of teacher/priest/judge/philosopher. They were the conservators of Celtic culture. Julius Caesar recognized them as his real foes in Romanizing Gaul and the Romans were ruthless in exterminating them. Their sacred groves were methodically destroyed. In Celtic society, Druids ranked above the warrior class, and Caesar wrote, “In truth it was [the Druids] who gave the orders, the kings being merely their servants and ministers of their will.” He stated the Druids underwent 20 years of study, that they were versed in astronomy, law, and philosophy, and that all learning was oral because they considered writing unfit for their sacred knowledge. He claimed that Britain was a center of Druidic learning and that an annual gathering of Druids was held near Chartres in Gaul. The Greek writer Diodorus Siculus wrote of the Druids that they could halt opposing armies by stepping between them, “. . . as though they had spellbound some kind of wild animals. Thus, even among the most savage barbarians anger yields to wisdom . . . .”

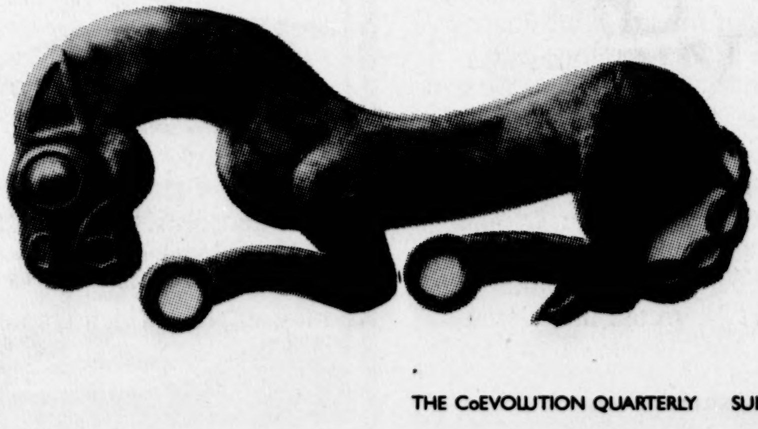
The Druids instigated many rebellions against Rome and though they were finally eliminated in Gaul, they survived in Ireland and other areas the Romans never penetrated. They were undoubtedly responsible for the tenacious survival of Celtic culture. Their tradition must have inspired the brilliant Celtic monks of the Dark Ages, such as St. Columba, St. Brendan, and St. Gall, and they lived on in legend as witches, alchemists, and the wizard Merlin.

The Scythians

Although they are little known today, the Scythians were an important people in the ancient world. They originated a way of life on the Eurasian steppes that was later imitated by a succession of peoples who are more familiar: Sarmatians, Alans, Huns, Mongols, Turks, and Cossacks. And they had a large influence in the shaping of Celtic and Germanic cultures.

In the first millennium B.C., the Scythians lived on the vast short-grass plains that extend from eastern Europe to China. There, in an area natural for it, they evolved a nomadic life of horseback warfare and stockherding. By selective breeding of horses and by developing such gear as saddles, bits, and bridles, they became the earliest people to truly master the art of riding. This gave them a mobility that was of great military advantage. The speed of their migrations astonished the Greeks, with whom the Scythians traded after plundering across south Russia to the Black Sea. Alexander the Great borrowed their war tactics for his cavalries.

The Scythians had a tribal society much like the northern Europeans. They spoke an Iranian tongue and they worshipped the elements and a great goddess of fire and beasts. They inhaled the fumes of hemp seeds thrown on hot stones as a religious rite. Scythian families traveled in ox-drawn covered wagons with solid wheels. They supplemented their larders by hunting and fishing, and they were skilled at curing hides and working metal. A small double-curved bow was the Scythians' principal weapon. They used it

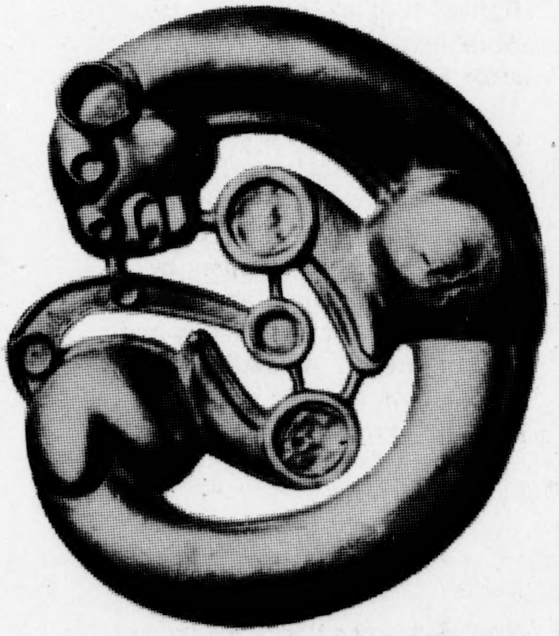


Silver plaque of a tiger from the Han dynasty showing its close affinity with earlier Scythian art such as gold panther ornament on opposite page.

THE SCYTHIANS, THAMES & HUDSON (1958)

to shoot arrows from horseback, carrying the arrows and bow in a case slung from their belt. They hung the heads of battle victims on their saddles and fashioned the skulls into ceremonial cups.

The Scythians buried their chieftains in elaborate mounds, often with horses, and in the tombs they left implements decorated with precociously beautiful artwork. Some of the art was realistic, portraying exact likenesses of Scythian warriors and their horses, cattle, and sheep; this may have been crafted for the Scythians by Greeks. The rest of the art was a sublime indigenous creation of gracefully stylized real and mythical beasts: moose, stags, boars, griffins. This art style is thought to have inspired various Germanic and Celtic styles. From contacts with the Scythians in the sixth century B.C., the Celts are thought to have also learned their horsemanship, burial practices, and styles of warfare and dress.



THE SCYTHIANS, THAMES & HUDSON (1958)

The Vikings

Fragmented and Christianized Europe in 800 A.D. was ripe for plundering by a pagan people. The Vikings matched this opportunity with a technology they had perfected in an area natural for it — the North and Baltic Seas. Much as the Scythians had become the first masters of horseback warfare, they became the masters of lightning-strike ship warfare. The Vikings were not unified by race, but by this technology.

The boats of other cultures had long plied the great rivers of Europe for trade. But the Scandinavians refined earlier boat designs into a sleek, shallow-draught longship, with oars manned by free warriors (the Mediterraneans used slaves). These innovations created a ship that was brilliantly suited for moving war bands swiftly along the European rivers and coasts. The Scandinavians created stouter ships for use on the Atlantic and for freight (called "knorrs"). They became the masters of the watery world.

From 800-1050 A.D., the Vikings put the fear of God into all of Europe. They settled widely, but they settled sparsely, usually only as a ruling elite. They were eventually absorbed by the populations they conquered. They buried their heroes in warship tombs, just as the Celts had buried their dead with chariots, and the Scythians buried theirs with horses. The Vikings carried with them the Barbarian tradition of tribal assemblies and warrior aristocracy. In their drinking and fighting and feasting they behaved just like early descriptions of the Celts, as well as Germans. Their art of knotwork and interlaced animals had close connections to Celtic art of the period, such as that in the Book of Kells.

The Viking epoch ended with the spread of Christianity in the North, and during the later Middle Ages the Scandinavian countries fell into feudalism and monarchy like the rest of Europe. But Iceland was always a special place. It was first inhabited by Irish monks. Around 900 A.D. it was settled by Norsemen fleeing Norway's king, and by Vikings from the British Isles with their Gaelic families and retinues. Iceland was where Norse democracy culminated in the famous Allthing of 930, which created the first nation in Europe without a king. It was in Iceland where practically all that is known of Scandinavian mythology was preserved. The Allthing declared Christianity in 1000 and chieftains became bishops. Slavery was abolished before 1100. Viking expeditions sailed from Iceland for Greenland and America. In its isolation, Iceland remained fairly democratic, though it recognized the Norwegian king in 1262.

A double-bladed Viking sword found in Northumbria.

THE VIKINGS, PHAIDON (1977)

The Indo-Europeans

One reason that the Scythians, Celts, early Germans, and Vikings were so similar is that they all had roots in the same earlier tribal cultures of Europe. Germans and Celts may have spoken the same language as late as 2000 B.C. Other Barbarian peoples, such as the Slavs and the Balts to the east and the Illyrians to the south had very similar societies and religions. The Illyrians bloomed and faded in power before the Celts; the Slavs followed the Germans, expanding south into the Balkans. Even the pre-Roman Italic tribes and the Achaeans of Heroic Greece (the Greece of Homer's **Illiad**, circa 1300 B.C.) had similar Barbarian cultures before they were influenced by the Eastern civilizations. In **Stonehenge: the Indo-European Heritage**, Leon E. Stover and Bruce Kraig write of the Vikings: "They represent the last of a long series of migratory movements by barbarian Indo-European peoples, which began with Kurgan folk."

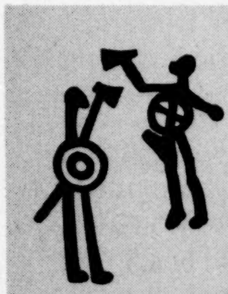
In 1786, Wiliam Jones, a British Justice in Bengal, found in studying the Sanskrit language of India that it had striking similarities to Greek and Latin. He theorized that these languages and maybe Celtic and German sprang from a common source. Since that time, linguists have strengthened that theory and included other languages such as the Balto-Slavic group and Iranian. By a process called glottochronology, words in these languages have been traced back to ancient common roots. The hypothetical parent language is called Proto-Indo-European. Only a few languages in Europe are not related. One of these is Basque, of the Pyrenees Mountains, which is thought to be the remnant of an older European tongue. Finnish and Hungarian are derived from a Uralic language of northern Eurasia.

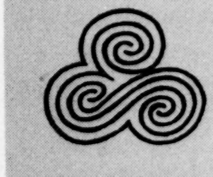
Ever since the linguistic relationship was established, scholars have sought to identify Indo-European cultural roots as well, and to identify a homeland from which the original language spread. These theories were distorted into the racial Aryan myth of the Nazis. That shadow still hangs over the subject, but the basic concept of an Indo-European linguistic and cultural link — without racial implications — is widely recognized, though the details are much disputed.

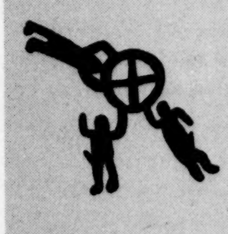
The most prevalent theory links the spread of Indo-European speech with the appearance of distinctive round barrow graves in eastern Europe, dated at about 3000 B.C. by archeologists. The types of these mounds varied widely as they spread through Europe, but they had certain overlapping characteristics. They usually contained only one corpse (as distinguished from the communal graves of earlier cultures) and the tomb was well-furnished with goods and trappings for an afterlife. These often included stone or bronze axeheads and daggers, decorated earthenware beakers that are thought to be ritual drinking cups, hammer-headed cloak pins of bone or copper, and horse remains.

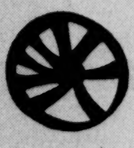
Archeologists have classified these mounds into related types, varying over time and region. The Battle-Axe/Corded-Ware culture left one variety of mound all across northern Europe from the Ural Mountains to Scandinavia, dating from 3000-2000 B.C. It is so named because of the characteristic stone axeheads and cord-decorated beakers of its graves. Corded Ware, horse bones, and single-grave barrows are also found in Greece, dating from 2000 B.C. The Bell-Beaker folk built similar mounds about the same time as the Battle-Axe people. Their mounds are located from Germany west to Spain and the British Isles. They appear to have brought metalworking to western Europe.

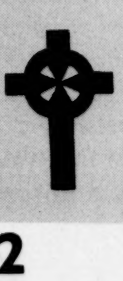
Archeologist Mariji Gimbutas has identified the earliest of these single-grave burials in southern Russia, dating from the fifth millennium B.C. She has named the people that built them the Kurgan folk (*kurgan* means "mound" in Russian). The Kurgan folk seem to have evolved a pastoral way of life (stockherding rather than farming) in the mixed forest and









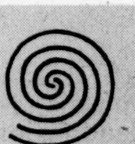


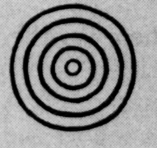
SYMBOL

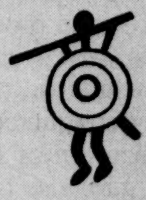
The circle or spiral was probably the most important Indo-European symbol. It is a recurring motif in rock carvings and other artwork dating to several thousand years B.C. It figured prominently in Celtic and Germanic art, and even the Celtic cross retains a circular motif. Early Indo-European religion is thought to have centered on sky gods — the Proto-Indo-European word for god, *deiwos* (shining sky), contains the roots of words like *deity* and *divine* in Latinized English, *Tiu* (a sky god) in Old Germanic, *Zeus* in Greek, *devah* (god) in Sanskrit, *Dieu* (God) in French, *dia* (day) in Spanish — so the circular motif is usually interpreted as a solar symbol. However, the circle takes many forms, from concentric rings to wheel-like disks with spokes, and in archeology these various motifs are referred to as "sun wheels" or "sun disks." The solar and wheel symbolism may come together in an ancient Indo-European myth that the sun is carried across the sky on the wheels of a chariot.

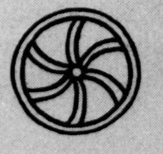
But it may all be bunk to interpret the circular motifs as one universal symbol. Indo-European cultures were very fickle with their symbols and their gods. No single deity or symbol was ever really dominant. They seem to have used designs that suited their fancy rather than their religion.

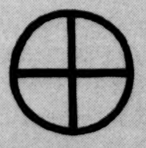
The swastika is often assumed to be a variation of the sun wheel. Hitler chose it for his Nazi party because he thought it was a characteristically "Aryan" symbol, found among Indo-Europeans from India to Greece to Scandinavia. Its name means "well-being, good luck" in Sanskrit. But the same design is also found in ancient American Indian art and in China and Polynesia. It was far from being the most important symbol among Indo-Europeans. If anything, it portrays a broken sun wheel, and the oldest known examples of swastikas now come from Mesopotamian pottery dated at 4000 B.C.

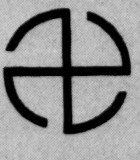


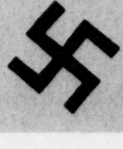












steppe north of the Black Sea (whence the Scythians also came, but much later). The Kurgan folk are thought to be the people who first domesticated the horse in its native range on the steppes. The small breed of wild horse they tamed seems to have been used primarily for pulling wagons and war chariots rather than for riding. The Kurgan folk obtained metal tools very early from people who mined copper in the Caucasus Mountains. Kurgan tombs contain copper shaft-hole axeheads of which the later Battle-Axe culture weapons are an exact imitation in stone (because metal was scarce in northern Europe).

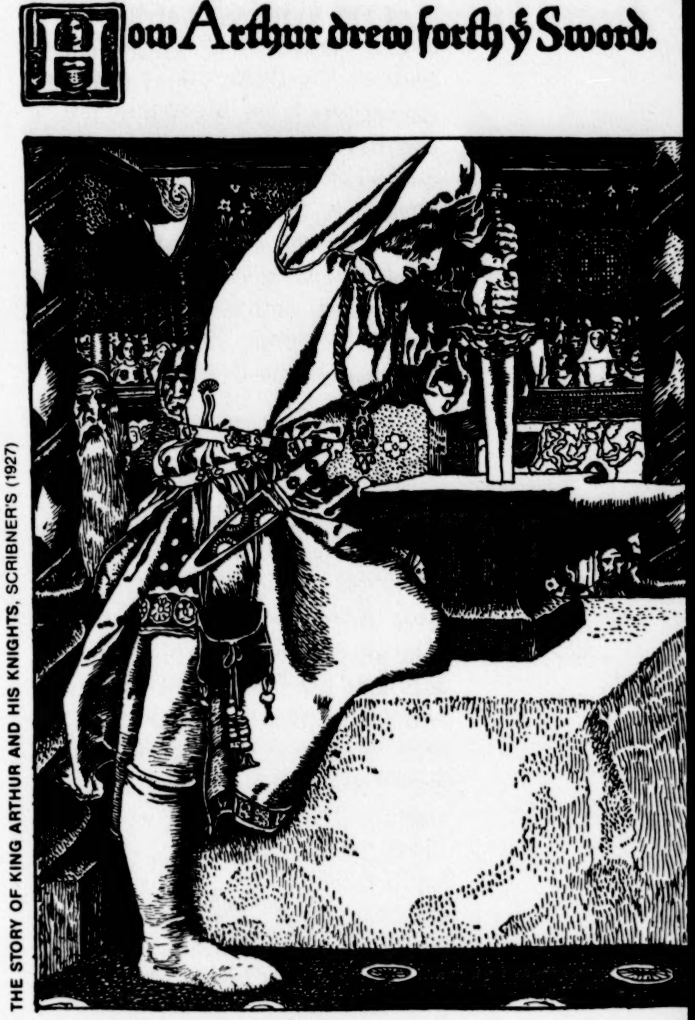
It is theorized that the various groups of Kurgan people on the steppes spoke Proto-Indo-European. They were pastoralists and horsemen, and with their metal weapons and mobility spread in several waves into Europe, dominating the Stone Age farming communities there. Their dialects mixed with the native tongues to form the various Indo-European languages. Linguistic evidence seems to support this theory and indicates that the Indo-European homeland was a temperate inland region like southern Russia.

There is other evidence: legends, written history, and cultural similarities. About 1500 B.C., a branch of the Indo-Europeans that spoke proto-Iranian invaded India in war chariots from a homeland on the Asian steppes. They conquered the native civilization of the Indus Valley and gave rise to the Hindus and the Sanskritic languages. The similarities between Hindu and Celtic traditions are often cited as evidence of a common Indo-European heritage. Significantly, Hindu and Celtic areas are where literacy was delayed the longest and represent the eastern and western fringes of Indo-European expansion. There are cognate Indo-European words that survive only in Sanskrit and Celtic, and many parallel myths and gods. The caste system of India shows vestiges of a three-part social structure like the Celts' priests/warriors/commoners. Hindu Brahmins were originally religious leaders comparable to Druids. For centuries they preserved the Hindu myths by oral transmission.

The Rig Veda, the most sacred book of Hinduism, may have been preserved orally by the Brahmins for several thousand years. It was not written down until the eighteenth century. It contains heroic sagas of hard-drinking, cattle-stealing charioteers and warrior chieftains like the thunder god Indra, "the sacker of cities." It is epic poetry very similar to ancient Irish tales like the **Tain Bo Cualnge** ("Cattle Raid of Cooley") and to the **Illiad** of Homer. Later Barbarian epics like the Anglo-Saxon **Beowulf** and the Viking Eddas are in the same vein.

Homer was a bard of Greece, circa 800 B.C., but his tales were based on an oral tradition of gods and heroes much older — probably Bronze Age warriors of 1600-1100 B.C. At that time the Indo-European bearers of the Greek language were conquering and trading in the northeast Mediterranean very much like Vikings. Homer called them Achaeans; archeologists call them Mycenaeans. From them, Greek democracy may have sprung. At first they had no cities, only citadels on hills, and were ruled by petty kings. The siege of Troy was one of their last forays. In the **Illiad** both Nestor and Achilles reminisce about their cattle-raiding days. The Homeric myths of these primitive warriors informed Greek civilization in the same way the Arthurian tales informed the Middle Ages, the Italic legends informed the Roman Republic, and the myths of the frontier informed the American Republic.

From all this can be surmised some persistent Indo-European traits: 1) a cult of individualism and heroism, as evidenced by the epic myths and by the tradition of burying heroes or chiefs in single-grave mounds; 2) a tendency to migrate and expand at the expense of other cultures; 3) a warlike nature and the attachment of a magical importance to weapons (battle axes in graves; Arthur's sword, "Excalibur"; Thor's hammer, "Mjollnir"); 4) a reverence of "steeds," the means of mobility — horses, chariots, boats, and now automobiles and airplanes; 5) an inclination toward ruralism and tribal government — if not true democracy, then aristocracy or meritocracy as opposed to the authoritarian rule of cities.


How Arthur drew forth ye Sword.

THE STORY OF KING ARTHUR AND HIS KNIGHTS, SCRIBNER'S (1927)

An illustration from Howard Pyle's classic rendition of the Celtic legend of King Arthur.

In **Stonehenge: the Indo-European Heritage**, Stover and Kraig interpret the ancient stone circle as a cultural monument, not some giant astronomical computer as many scientists do. It may have been built in respect to some simple celestial alignments, but it would have been built on such a massive scale only as a political or religious monument. It was a sacred site for several cultures and was rebuilt in several phases during a thousand years. They believe its final phase of construction — the setting of huge upright stones which was never completed — was initiated by Indo-European chieftains about 2000 B.C. as an intertribal center of assembly and magical power. As such, its shape symbolizes a circle of peers and connects with the war band tradition, the Round Table of King Arthur, the symbolic circular crown of European monarchs, and perhaps our own Capitol rotunda. It represents a very early sort of parliament.

The Indo-European legacy does not imply an unbroken chain of culture from prehistory to the present. No culture is like that. India and Ireland are very different places, as are Germany and Scandinavia. Indo-European speech and society were greatly changed by the regions and cultures they invaded, and by several thousand years of historical events.

The Imperial Heritage

The seeds of Empire grew first amid the ancient civilizations of the Near East. They spread from Sumer and Akkad to the Egyptians, the Assyrians, the Babylonians, the Persians, the Alexandrian Greeks, and then to mighty Rome. They flourished where there was urbanization, literacy, wealth from trade, and intensive agriculture. Imperialism is contagious. It is often borne out of the need for self-defense against other Empires.

Empires are characterized not only by their expansionism but by their authoritarian rule administered by a bureaucratic elite. They often have a deified dictator. In an empire, the only real religion is nationalism. Slavery, in some form, is also intrinsic to empire; without its cheap labor the great civic structures of an empire could not be built.

After Rome's fall, the Germans inherited its vision of a European Empire. For 500 years, from Caesar's conquest of the Celts in 51 B.C. until the final collapse of the Western Roman Empire about 476 A.D., German tribes lived along the northern Roman frontier. During this time, these Germans south of Scandinavia changed a great deal. Their relationship with Rome was long and complex. It involved diplomacy and trade as well as conflict. To protect its borders, Rome intervened in German politics, siding in tribal feuds, assassinating chieftains, attempting to set up puppet rulers. Germans were hired to fight in Roman armies. German chiefs intermarried with Romanized Gauls. The Romans sometimes sent young German captives to Rome to be educated, then returned them to their people to spread Rome's influence. Roman ideas of autocratic power were deliberately introduced into Germany and tribal ways were gradually abandoned by the Germans. The wealth and power of Rome was alluring. Many chiefs became wealthy through trade and alliances with Rome, and gained permanent control of bands of warriors. Throughout this period and the Migration Period that followed, the warlike aspects of German society intensified. The old Earth goddesses were mostly forgotten and the major deities became the gods of war: Wodan and Thor.

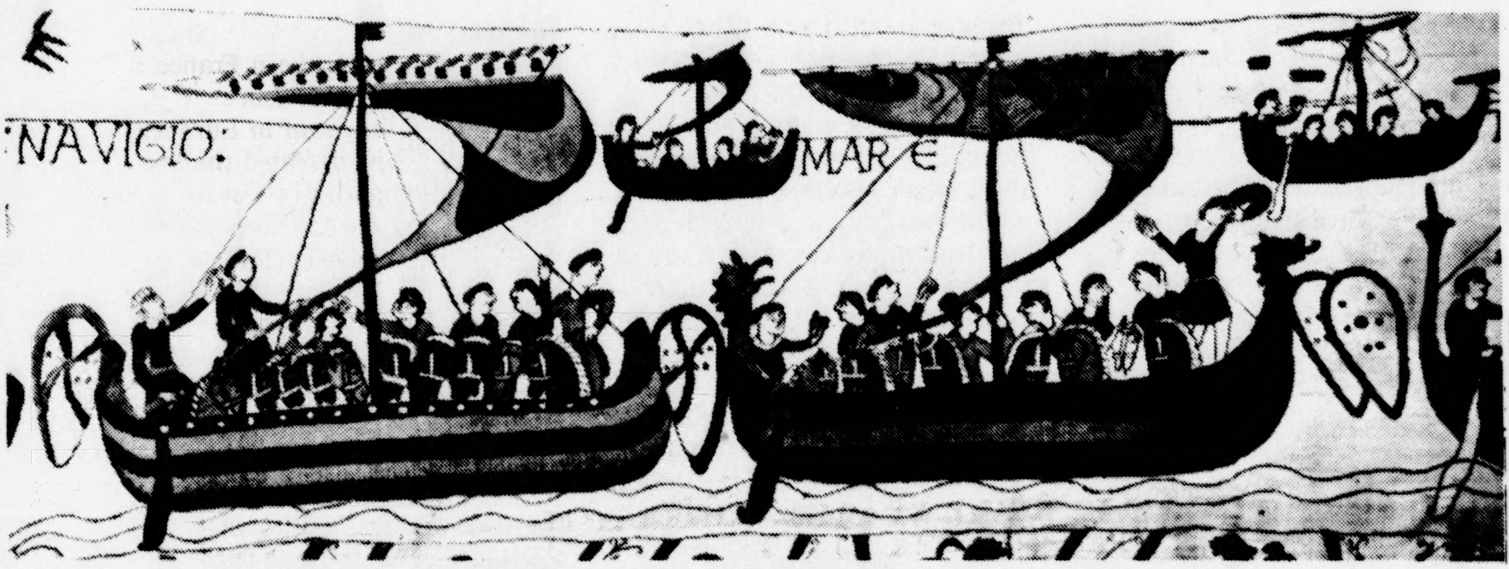
By 400 A.D., many German tribes had been incorporated into the Empire as federates, and the Roman army was composed mostly of German and Hunnish mercenaries. Rome had weakened for many reasons and German generals came to wield the balance of power in the Empire. They set up puppet emperors. Visigoths sacked Rome in 410 and Vandals sacked it again in 455. In 476, a Barbarian general named Odoacer deposed the last western Roman emperor and ruled Italy. German tribes swarmed all over western Europe and settled as far as north Africa. But by this time, many German rulers were so Romanized that they did not seek to destroy the Empire but to claim the title of Emperor for themselves.

In 469, a man named Childeric was the leader of the Franks, Germanic tribes that had settled in what is now northern France. He founded the first real dynasty and kingdom in Europe. His son, Clovis, defeated the last Roman commander in Gaul in 486, enlarged the kingdom, and was baptized a Christian in 496. The grave of Childeric was discovered in 1653. It was undoubtedly his because it was extremely rich in gold jewelry and ornament, and contained a signet ring engraved "Childerici Regis." The artwork in the tomb was of a late Roman style, not Germanic. Napoleon Bonaparte based some of his own regal insignia on this find.

In 800, Charlemagne, King of the Franks, revived the title of Emperor for himself and proclaimed the Holy Roman Empire, which eventually stretched from northern Spain through France to eastern Germany and from the Netherlands south to northern Italy and Austria. Though his Empire fragmented after his death, this was a milestone of the Middle Ages. Here the Roman Catholic Church flourished and here feudalism emerged from a mixture of the German and Roman social systems and in response to a new Barbarian threat: Vikings from the isolated North.

Charlemagne and the continental Germans kept alive the legacy of Empire that was revived by Napoleon, Mussolini, and Hitler. The Nazis viewed Charlemagne's Holy Roman Empire as the First Reich, from which their Third Reich was descended. The title of Roman Emperor was used as late as 1806 by Francis II, Hapsburg ruler of Austria. *Kaiser*, title of the nineteenth-century Germanic rulers, is derived from *Caesar*.

Among the Slavs, Ivan the Terrible sought to revive the Roman Empire at Moscow. He took the title *Czar* (Caesar) in 1547 and proceeded to annihilate his opponents. He believed himself a descendent of Augustus Caesar. His grandfather had married the niece of the last emperor of the Eastern Roman (Byzantine) Empire. Russia had long been



THE VIKINGS, PHAIDON (1977)

Normans invading England in 1066, from the Bayeux Tapestry. William the Conquerer's dynasty-building laid the foundations of the British Empire.

linked to Byzantium through its Church, the Eastern Orthodox.

The Normans carried the Imperial vision to Britain. Rome's rule of its province, Britannia, was relatively superficial and when the Roman garrison left in 410, the island reverted to Celtic anarchy. The Angles, Saxons, and Jutes invaded this power vacuum, but they were primitive north Germans and Britain remained essentially Barbarian until the Normans came 600 years later. The Normans were originally Danish Vikings — "Northmen" — who had settled on the coast of France about 900 A.D. They mixed with the Franks and adopted their Latin language, Roman Christianity, and feudalism. One particularly ambitious Norman duke, William the Bastard, invaded England in 1066, changed his name to "the Conquerer," and began a domination of Britain that has been modified but never superseded. Most of the English upper class still trace their lineage from Norman nobility. William and his dynasty built a powerful government superstructure consisting of huge castles, taxes, layers of officials, and the first census, the "Doomsday Book." They tirelessly expanded their centralized control, subjugating Ireland for the first time and reaching back home to acquire half of France. They laid the foundations of the British Empire.

The United States is a descendent of the British Empire. Though the young colonies rebelled against England and aspired to the republicanism of early Greece and Rome, the nation eventually became an Empire itself. The traditional emphasis on America's Greco-Roman roots may be justified in this respect. The eagle was the emblem of Rome's legions. Despite an Old Germanic base, English is a heavily Latinized language. Especially when we speak bureaucratese and the language of technocracy, we rely heavily on Latin compound words.

An Ancient Path

We have a complicated heritage. I have simplified it and refracted it in such a way as to illuminate certain points. While it can be portrayed, for clarity's sake, as a family tree, I think it more truly resembles a thick gnarly hedge, still as yet untangled. The Indo-Europeans seem to have left us a mixed blessing: a love of freedom and of nature but also of war. The Eastern civilizations have bequeathed us civility and literacy, but also empires and authoritariansim. And when Indo-European valor combines with the vision of Empire, the results can be especially horrendous.

We must come to terms with our Western penchant for war. But it may not be a love of war so much as a love of battle — of adventure and vitality. An adventurous spirit spawns other things besides war: art, innovation, rebellion, and exploration both physical and intellectual. If we can find better pursuits than war, it is not such a curse. It is Empires that are most effective at employing vitality in the service of war and genocide.

My main point is that the dominant form of Western culture — imperialism and technocracy divorced from Nature — is not our only European heritage. We have other roots that have never died out and that can provide an indigenous foundation on which to create a new age. We can look to new ideas, we can look to foreign cultures, and we can also look into our own past. There is a Western heritage that is not all bad.

Though it is not unique, I think the Celtic stream of Indo-European culture has best preserved the spiritual side of the West. On the fringes of civilization, it has kept close mystical ties to Nature and has stubbornly resisted absorption into mass culture. The Celts are perpetual freedom fighters. The Welsh, the Scots, and the Irish still have separatist movements despite a thousand years of

English dominance. The Celtic tradition has always been a folk tradition. It has celebrated the common man rather than elitism or the cult of being “civilized.” It has demonstrated that there can be great learning, art, music, literature, and technological innovation without institutions and Empire. It is the heritage of Thomas Jefferson, Robert Burns, Roger Williams, John Muir, James Joyce, W.B. Yeats, Dylan Thomas, and arguably of Shakespeare, Rousseau, Blake, and Bateson, to mention but a few.

I think the Celtic heritage looms large in America. Some scholars believe that despite its Germanic language, rural England remained largely Celtic. It was these common English folk who came in large numbers to early America, as well as many Welsh, Scots, and Irish. Many of the French who came to America to become voyageurs and missionaries were Bretons and Walloons. Celts were often persecuted and disenfranchised in their homelands and they learned to live as outlaws, sailors, adventurers, and subsistence hunter/farmers in wild areas beyond society's constraints. By the sifting process of emigration, I think America became, in many ways, a new Celtic frontier. In the forests, mountains, and plains of America, the Barbarian spirit was rekindled. Much of what is distinctive about the American spirit may have Celtic roots. Celtic Anglophobia may have played a large part in the American Revolution.

I don't want to sanitize or sanctify the image of what in ancient times was a very violent and carnal way of life. The ancient Celts were of a very different time and place. We would not want to go back there even if we could. Civilization has given us benefits that can't be denied. But Celtic culture, as it has survived in the fringes of Europe and America, is one of the few cultures that combines gentleness with an adventurous spirit, humor and humility with eternal defiance; that has the exuberance to grab life whole, in all its contradictions and convolutions. The modern Celtic tradition may be richer and sweeter because of all its struggles, for being suppressed, for having to grow inward and entwine upon itself.

I look to Celtic traditions for the traces of an ancient path into the future. Although I have no direct Celtic background, it is a culture I can sink my roots into. It is complex and deep, and I am continually discovering magical new facets — such as the Celtic god, Ogmios. He was the god of eloquence and certain Celts equated him with the Romans' Hercules, because the Celts believed that eloquence was more powerful than strength. ■

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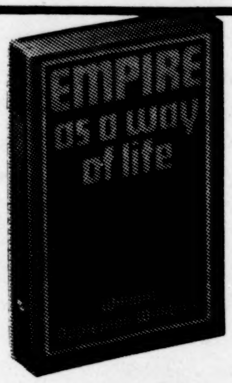
Empire As a Way of Life

Empire As a Way of Life
William Appleman Williams
1980; 226 pp.
$7.95
postpaid from:
Oxford University Press
16-00 Pollitt Drive
Fair Lawn, NJ 07410
or Whole Earth Bookstore



The author is the best known of the revisionist historians, a welcome group of dissident scholars offering new perspectives on our national background. He illustrates how the U.S. had no sooner struggled free of the British Empire than we developed our own notions of what was good for the world. First came the idea of Manifest Destiny, made official by the Monroe Doctrine abroad and the elimination of Native Americans at home. That pattern of thinking continued to develop until it had taken us through Viet-Nam and straight into Central America.

Williams' insights have added to my understanding of the day's news as well as brought back an expression that my host-country nationals often threw at me when I was in the Peace Corps: that America "chupa la sangre de Ecuador," drinks the blood of Ecuador. When I took time to analyze Ecuador's role in the "free world" economy — producing cheap raw materials while consuming expensive manufactured imports — I finally saw the connection.

This book produces similar insights as it discusses a lot of theory and some of the practice of empire, a practice based on the metropolis being fed by the provinces. If you've ever studied Rome, either rising or falling, it will make sense. It's a perspective that goes beyond anything we learned in social studies class, and if your mind is still flexible and your memory longer than last night's CBS news, you'll be able to fit some of the contradictions together.
—Dick Fugett
[Suggested by Paul Loeb]

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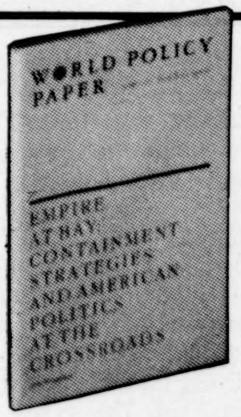
Those people, our Revolutionary and Founding Fathers, knew the ideas, language, and reality of empire from their study of the classic literature about Greece and Rome (and about politics in general); they used the word regularly in their talk about England; and they came increasingly to employ it in speaking of their own condition, policies, and aspirations. It became, indeed, synonymous with the realization of their Dream — no matter whether they honored the vision of a City on the Hill giving Truth to Mankind, spoke of vast property holdings in the city or on the frontier, sought a tiny clearing in the wilderness, or worried about social and political stability within a framework of representative government.

Later generations became steadily less candid about their imperial attitudes and practices. They talked ever more about "extending the area of freedom," supporting such noble principles as "territorial and administrative integrity," and "saving the world for democracy" — even as they destroyed the cultures of the First Americans, conquered half of Mexico, and relentlessly expanded their government's power around the globe. Empire became so intrinsically our American way of life that we rationalized and suppressed the nature of our means in the euphoria of our enjoyment of the ends. Abundance was freedom, and freedom was abundance.

Empire at Bay

Empire at Bay
(Containment Strategies and American Politics at the Crossroads)
Jerry W. Sanders
1983; 50 pp.
$3
postpaid from:
World Policy Institute
777 United
Nations Plaza
New York, NY 10017


WORLD POLICY PAPER
EMPIRE AT BAY CONTAINMENT STRATEGIES AND AMERICAN POLITICS AT THE CROSSROADS

In this short monograph (45 pages) Jerry Sanders sums up the U.S. foreign policy debate displayed in the contrast between early Carter policy ("managerialism") and the Reagan approach we are witnessing now ("containment militarism").

Both sides of the debate take as a given the desirability of dominant U.S. influence in international economic and political affairs (the responsibilities of empire we inherited from the British after World War II), but their strategies differ in profound ways. Sanders notes the weaknesses of both policies, with particular criticism of the "zero-sum" analysis of the militarists, which interprets any "loss" in absolute U.S. superiority as a "gain" for the Soviets.

This debate cuts across party lines and is intertwined with contrasting domestic policies, so even a rudimentary grasp of it is invaluable in assaying current events. Sanders traces the impact of this policy debate on administration responses to Central America and the Freeze/Peace movement right up through early 1983, giving what might otherwise be an exercise in abstract analysis an up-to-the-minute relevance.

***Empire at Bay** is World Policy Paper Number 25, published by the World Policy Institute (formerly the Institute for World Order). This is alternative thinktanking of the highest order, here made accessible to the general public.*
—Jay Kinney

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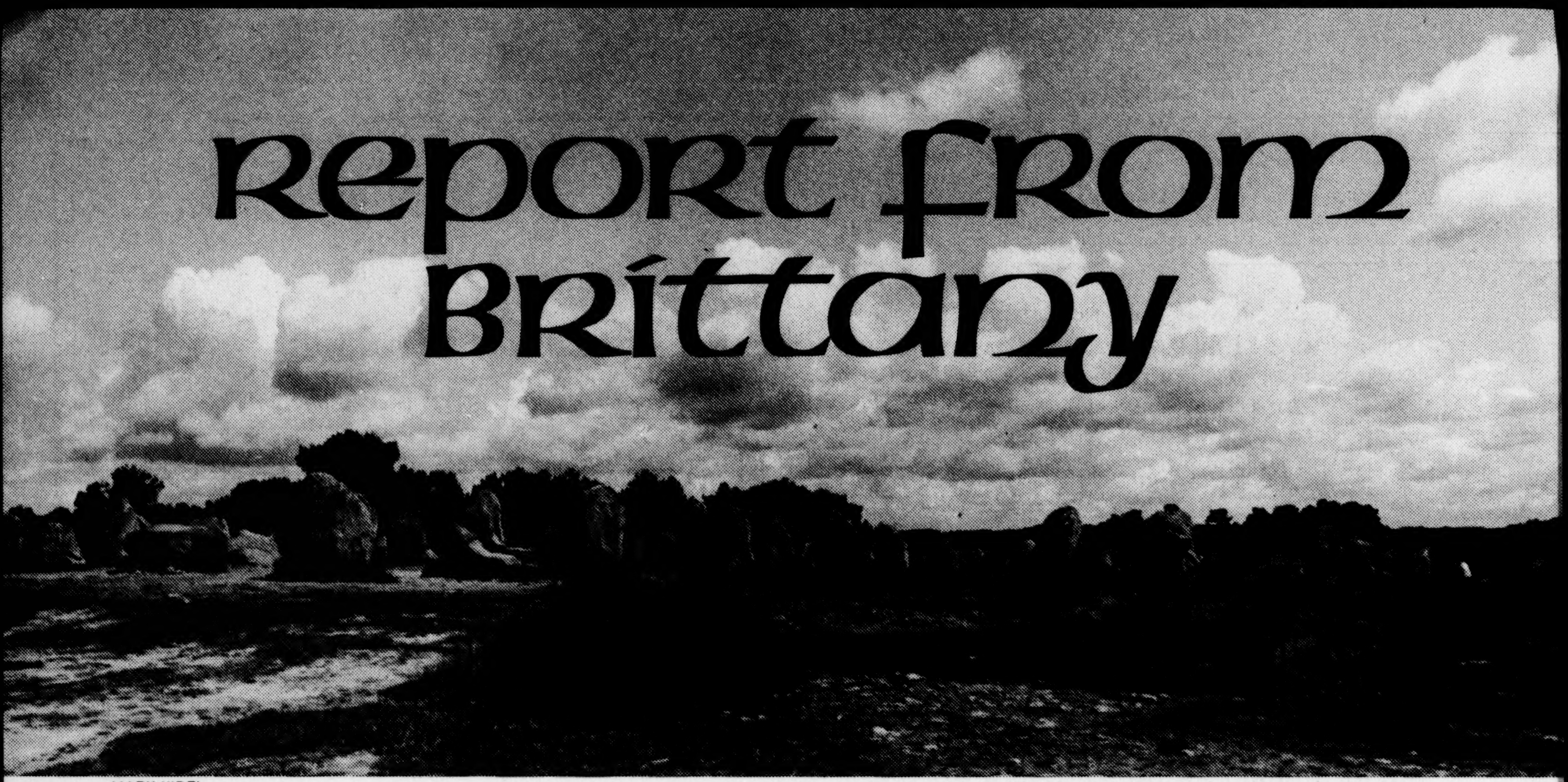
From the managerial perspective, detente was not the problem but rather the solution. The problem was a world order in flux, spinning out of control. Detente was, in effect, a moderate form of containment, neither phobic about global transformation nor myopic about its source. Its goal: to steer and manage the centrifugal exertions pulling away from the Amercentric postwar order rather than attempt to halt these processes through the threat and use of military force. Carter's human rights and early arms control strategies represented refinements of the underlying thrust of detente. As such, they stood in the way of a return to Containment Militarism and would have to be unceremoniously discarded.

"Human rights" was especially threatening to containment in that it defined the principal axis of global conflict in North-South rather than East-West terms. In his controversial Notre Dame speech, Carter had boldly put forward the thesis that "threat of conflict with the Soviet Union has become less intensive" and the greater threat to peace now came from a world "one-third rich and two-thirds poor." He also let it be known that dictatorial guardians of privilege in the Third World would no longer be granted the automatic moral authority — followed by military aid — enjoyed under the old East-West paradigm. Instead, in truly managerial fashion, Carter hoped to mediate deep and long-standing conflicts between privilege and poverty, utilizing aid leverage to prod recalcitrant regimes toward reform before they were swept away by revolution. . . .

Report from Brittany



MARK KIDEL

by Mark Kidel

SOMETIME DURING THE SEVENTH CENTURY, the Celtic inhabitants of the southwest of England (now Devon and Cornwall) fled, in the face of increasing Saxon encroachments, across the English Channel to the large peninsula that lies at the northwest tip of France. Today's Brittany and its ancient Breton culture have their origins in that migration. I first traveled there across the sea from Devon in search of Celtic roots, a tradition long dead in the English southwest and barely surviving in Cornwall. I went with Kim Wilson-Gough, a Welsh friend, to explore in particular the manner in which the old ways are helping contemporary moves toward decentralization and the reemerging politics of place.

Brittany is a magical country: like the other Celtic lands at the westernmost fringe of the European continent — Scotland, Ireland, Wales, Cornwall, and Galicia — it is a region steeped in myth and legend, one of the gateways, according to ancient lore, into the underworld. The Pointe du Raz, at Brittany's western tip, was reputed to be the major embarkation point for the souls of the dead.

Lying as it does at one of Europe's extremities, Brittany has been less touched than the other parts of France by Christianity and later by the scientific and industrial revolutions. The close relationship with land and nature that were so central to Celtic beliefs have survived, in all sorts of ways and customs, to this day. Brittany's peasant culture is still a living memory.

France has been one of the most centralized nations of Europe. The industrial revolution may have come later than in Great Britain — with the resulting survival of a much more vigorous rural culture — but political control became concentrated in the capital more rapidly than in other countries. The French Revolution and Napoleon's reign created a highly centralized political and educational system which almost completely destroyed indigenous power and self-respect: the *préfets*, autocrats nominated by the minister for the interior to rule each administrative *département* (areas which bore little relation to bioregions or subjective cultural boundaries), and the *lyceés*, public secondary schools designed to turn out centrally-thinking Cartesian Frenchmen, were both devised as foundations of the Parisian government's programme for uniformity.

Brittany, semi-independent within the feudal system, came under the control of the French crown at the end of the Middle Ages; the Bretons paid dearly for backing the wrong side during the years that followed the French Revolution. The Chouans, a small section of the population, led by the remnants of the local nobility, took part in a royalist — but above all Breton — counterrevolution. Brittany was never forgiven for its association with the *Ancien Régime*, and any subsequent resurgence of local feeling was to be branded as

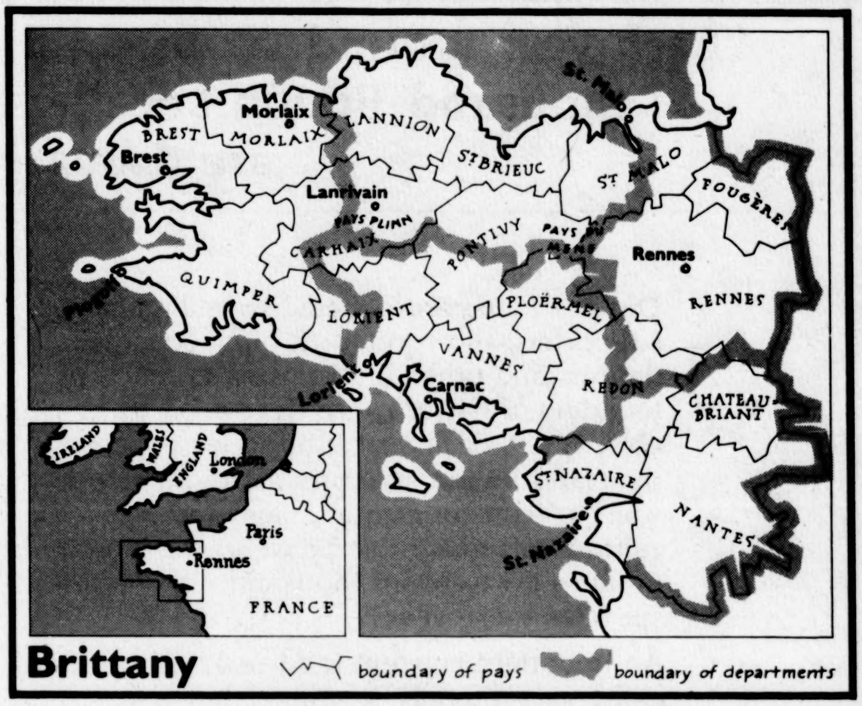
While the preceding "Barbarians and Empire" helps place the Celts in our western history, this report from Brittany gives the particulars on one strain of current Celtic culture. Mark Kidel, a print and video journalist living in Devon, England, writes regularly for ***Resurgence****,* ***The Sunday Times****, and* ***The Observer****. He's currently working on two video projects: a film about men's initiation and one on a community history project in the Devon area.* *—Jay Kinney*

◄◄ One of the major megalithic alignments at Carnac, once the center of a major cult related to planetary movements, the sun, the moon, and major constellations. John Michell, Professor R. Thom, and others have suggested that the alignments reflect a very thorough understanding of mathematics and astronomy, as well as the capacity to combine science and spirituality, intellect and intuition.

antirepublican and therefore antipatriotic and reactionary. The opponents of Breton nationalism were equally quick to capitalize on the connections between some elements within the Breton movement and the Nazi occupiers during the Second World War. There was collaboration, but probably no more than in other parts of France. The power carried by these accusations to this day, however, reflects very clearly the depth of antagonism which Breton nationalism has generated (and continues to generate) in France.

Language is central to Breton identity. The words, proverbs, songs and stories that make up the culture's almost totally oral tradition are more important than any ideological thesis about local politics. The forced teaching of French in primary schools throughout the region since Napoleonic times has contributed as much as any other factor toward the gradual disintegration of Breton culture. Men and women alive today can remember being severely punished and humiliated for speaking their mothertongue at school (though not beaten, as the Scots were for speaking Gaelic in the classroom). The great revival of Breton tradition since 1945 has focused on language as well as music, dance, and costume. *Cercles Celtiques,* formed all over Brittany, drew their strength from the traditions that were fading but still alive in the countryside: the last players of the *biniôu* (the Breton bagpipe) and *bombard* came out of retirement to teach younger people, and songs, legends, and herbal remedies were passed on by mothers, fathers, grandparents, aunts, and uncles.

More recently, Breton nationalism has been strengthed by its alliance with the growing "alternative" movement — the anarchists, decentralists, "greens," and survivors of the many radical splinter groups that flourished after the student upheavals of 1968. The Breton cause has given them a context rooted in traditional language, song, dance, and place, while the ideas generated during the 60s and 70s have provided the Breton movement with new and appropriate political and economic tools. It is an alliance which has grown naturally out of a convergence of interests which are fundamentally opposed to the centralized and industrialised state. It was this combination of the old and the new, the traditional and the utopian, which had originally drawn Kim and myself to Brittany. The projects we saw and the people we visited were mostly representative of this alliance; they are not, however, representative of all the many strands that make up Breton culture and politics.



DON RYAN

A map of official and unofficial Brittany: The thick grey lines show the five 'departements' recognized by the centralized French government. Underneath, the 17 'pays' are shown. These latter boundaries are much more subjective but nevertheless a reality in the hearts and minds of the local communities.

It is clear that language, local traditions, and feelings about place provide far more than just tools in the struggle for cultural identity. For many of the people we met, the language provided something close to a spiritual focus; the spoken words and the contexts of thought they created were just one facet of a vibrant set of activities and processes including place, work relationships with individuals and groups, dance, music, and schooling that woven together provided a sense of meaning and pattern. Those of us who have grown up mobile and rootless find it difficult to do more than appreciate such a multifaceted culture with our intellect. The key to living culture, however, is that it is *felt.*

The Breton language, however, is in serious danger: it has been systematically stamped out, and it is not officially recognised by government authorities. In the last few years, many young people have taken to learning Breton, and groups of history teachers have produced an outstanding history of Brittany and the other Celtic nations for use in schools and in adult education. The greatest hope lies in the Diwan movement. *Diwan* means "young green shoot." It is an apt image; the movement has been responsible for launching 18 *écoles maternelles* (kindergartens) and two primary schools since 1977. Well over 200 children now attend Breton-speaking schools. Diwan's total budget for 1982 was just under 3,000,000 francs ($500,000) and provided salaries for 33 teachers. Eighty-four percent of

"Each year around six to seven thousand Breton speakers are dying."

Diwan's funds are donated by militants and supporters, or acquired through concerts, dances, and other fund-raising events. The founders of Diwan were clear about their objectives: "Each year around six to seven thousand Breton speakers are dying. If we want to fight for our language and our culture, our goal must be clear: We must produce six to seven thousand new Breton speakers every year."

An important concept (and reality) in Brittany is the *pays* (literally "country," but also "village," a small rural area or patch of land to which one is attached). The *pays* is often spoken of as something to which a person belongs: *Mon pays* means the place from which I come, my roots, my home. It is a traditional French rural expression, found all over France. The Breton equivalent is *vro* — close to the Welsh *bro*. The idea has been considerably strengthened, and politicised, in recent years by the rallying cry *"Vivre et travailler au pays,"* a slogan that originated in Brittany. The slogan expresses quite literally a person's right and need to find a livelihood close to his/her roots, on the land that has nurtured one.

The *pays* has been taken up as an alternative to the administrative structures (*départements* and *communes*) set up under Napoleon. It is a more flexible concept, built around a sense of allegiance and shared customs. In the case of the Pays Plinn, for instance, in Central Brittany, a group of parishes is linked by a particular dance style, the *plinn*, which is still vigorously practised in the regular village dances, the *fest-noz*. In other cases it is a question of dialect, a particular agricultural bias, or just shared isolation from the neighbouring market towns. The *pays* does not exist on paper — only in the heart — and in a world ruled by bureaucracies it is, quite naturally, a constant source of disagreement. There is something self-defeating too about adopting such an un-mappable concept as a new political device, for, unlike the *départements* which were drawn up by metropolitan cartographers, the *pays* have no clear boundaries; and besides, each *pays* is minutely subdivided, with each small village proud of its particular variation on the costume or dance that is characteristic of the *pays*. In the Pays Bigouden, for instance, which lies to the west of Quimper, the female headdresses (the *coiffes*) vary within a few miles' distance, and those differences cannot be ignored, once you begin to rekindle a sense of place.

The area around the village of Lanrivain (approximately 500 inhabitants) is called the Pays Plinn, or sometimes just *la montagne* (the mountain or hill country). It is on the plateau that lies at the centre of the *département* known as the Côtes-du-Nord (literally, the Northern coasts, but the Pays Plinn has no contact with the sea at all) and is part of the area traditionally known as Haute Cornouaille. It is the most traditional (or backward, depending on your point of view) part of Brittany. It is also the rainiest and the poorest, at around 900 feet above sea level. The Pays Plinn derives its name from a traditional circle dance which originated and still flourishes in the area. In the old days, each area had its own dances, every one of which would have variations in individual villages. Only ten miles from Lanrivain, the *plinn* is replaced by a related dance, the *fisel*.

Kim and I went to a *fest-noz* in Duault, a small village at the western edge of the Pays Plinn. The *fest-noz* is a "night feast," a dance which starts at around ten p.m. and takes place in barns or village halls in the winter and outside during the warmer months. Fifty years ago, such dances were held to celebrate the end of harvesting and threshing, when whole village communities worked together. Traditional Breton dancing, with its roots in pagan ritual, was hated by the Church, continually criticised and often banned, particularly when it took place after dark. With the decline of the Church's influence, the dances flourish once again at the dead of night, but they are no longer connected to the cycle of seasonal work: the coming of agribusiness has all but completely destroyed communal work.

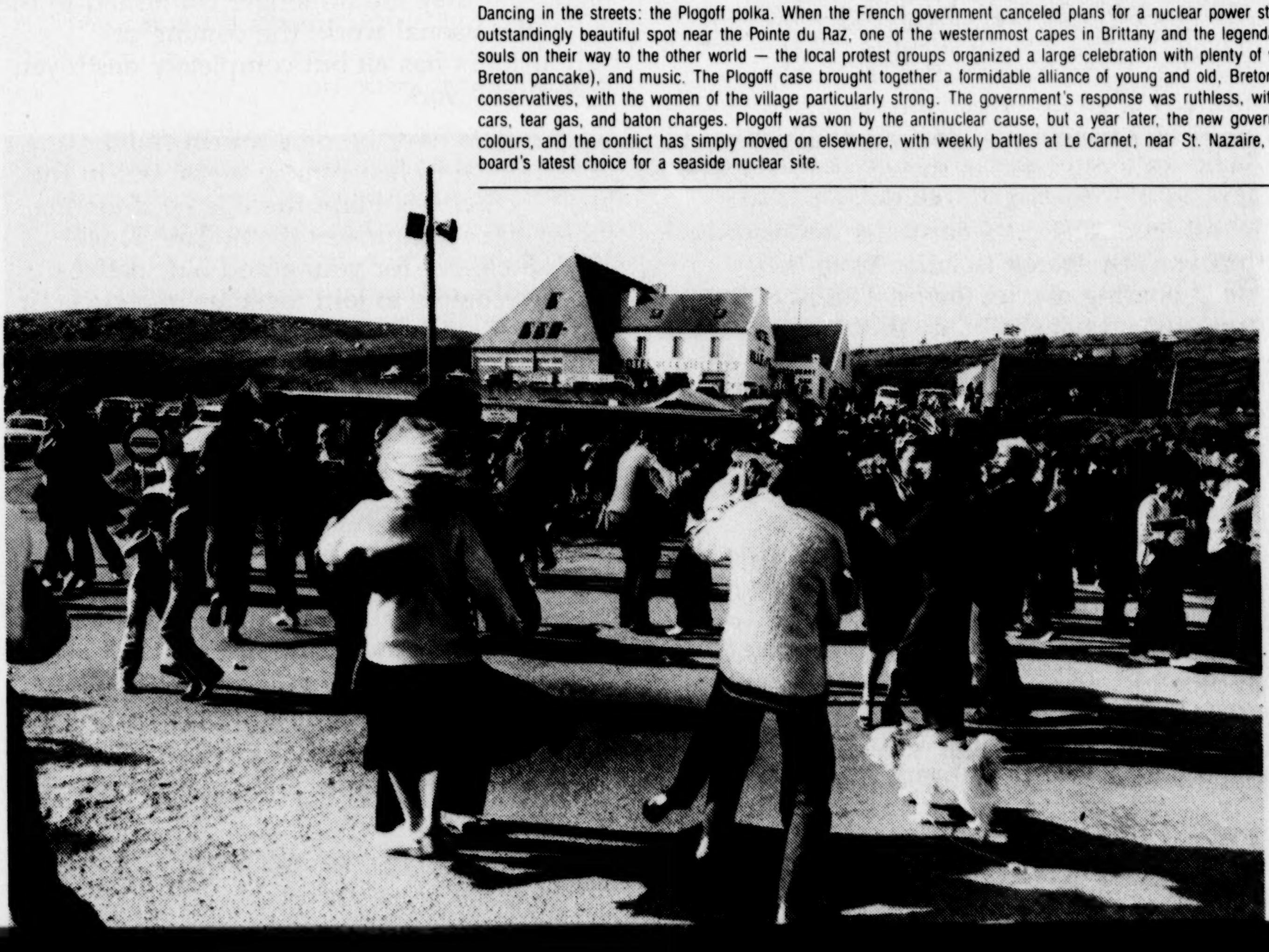
Such events have become tourist fodder in the coastal and less remote areas, but in the heart of the Pays Plinn there is no doubting the spirit that animates them. The dance offers a chance for young and old, natives and newcomers to join together in a circle. It is a form which acts as a lived symbol for the business of living in a shared place. We joined the dance with friends who lived a few miles from the village and were known in the area. We felt like strangers, but we were guests, introduced into the circle. A few months later, I returned to the area and, thirsty for more of the almost trancelike drunkenness which the *plinn's* circular motion produces, I gate-crashed a *fest-noz* near Lanrivain. I did not know anyone there, and I could not have felt more out of place, detached from the sense of identity and belonging which gives the *plinn* its undeniable strength.

The *plinn* should not be dismissed as a folkloric curiosity, for it forms an integral part of the cultural web which provides the *pays* with its sense of separateness and identity. As in the rest of Brittany, local efforts to be economically self-reliant are inextricably tied up with projects designed to strengthen local tradition. Lanrivain has a Center for Training in Traditional Music (Centre de Formation à la Musique Traditionelle), which provides classes in traditional singing, dancing, bagpipe and *bombard* playing. Among the teachers is Jean-Francois Kémener, one of Brittany's most respected traditional singers, with a family tree that is firmly rooted in the *pays* centuries back. He comes from a family which has inherited a tradition of ballad singing known as *kan han diskan* (call and response) which accompanies, without instruments, the *plinn, fisel,* and other dances of central Brittany.

Jean-Francois learned to sing from his parents, and also learned about herbal medicine, healing, and above all a way of being which has not changed for centuries. When we met him, he lived in a small and very old stone cottage outside Lanrivain, drawing his water from a well and living without electricity. He grew his own vegetables but was the first in a long line of Kémener singers not to farm full time. His talent has drawn him away to festivals in Germany and Holland, and he has less and less time to collect old songs and stories from local farmers and their "wise" wives.

Kémener is just able to live off his singing and records, but he never charges when he sings at a *fest-noz.* Neither do the famous Frères Morvan, whom we heard at Duault. These four bachelor brothers, all of them traditional-style farmers, are the acknowledged stars of the *kan han diskan* tradition. They are in their seventies and eighties, and only three at a time ever perform together, as one of them has to stay at home to look after the farm's animals. When the Frères Morvan or other *kan han diskan* singers perform, they often stand on an old haycart, bunched together close to the mike, with their arms firmly clasped around each other's shoulders, forming a tight semicircle that is characteristic of central Brittany and which echoes the close physical contact of the *plinn.*

Lanrivain has been the base for an important experiment in local communication, the **Journal Parlé** ("spoken newspaper"), a regular cassette "newspaper" with a circulation of over 400 tapes. The **Journal Parlé** was created by René Richard, a former radio journalist, with the help of central government funds available for cultural aid. It is fortunate perhaps that "culture" at least has become increasingly more decentralized in France, and that funds of this kind have been available for work that is as political as it is cultural. Breton is a predominantly *oral* language (unlike Welsh, which has an important written tradition), but the Breton that is broadcast on radio and TV (in very small doses) bears little relation to the many local variations of the language. These variations, of course, are just as important as the dances in providing a living focus for a



Dancing in the streets: the Plogoff polka. When the French government canceled plans for a nuclear power station at Plogoff — an outstandingly beautiful spot near the Pointe du Raz, one of the westernmost capes in Brittany and the legendary embarkation point for souls on their way to the other world — the local protest groups organized a large celebration with plenty of wine, cider, crêpes (the Breton pancake), and music. The Plogoff case brought together a formidable alliance of young and old, Breton and French, radicals and conservatives, with the women of the village particularly strong. The government's response was ruthless, with helicopters, armoured cars, tear gas, and baton charges. Plogoff was won by the antinuclear cause, but a year later, the new government has revealed its true colours, and the conflict has simply moved on elsewhere, with weekly battles at Le Carnet, near St. Nazaire, the French electricity board's latest choice for a seaside nuclear site.

MARK KIDEL

There are over a dozen new *radio autonomes* or free radio stations in Brittany which have grown up since the Socialists took over.

sense of place; besides, many Bretons are unable to understand the official language that comes through the media.

René Richard started the project in 1977. The first cassettes were made up of traditional songs and stories, but local news was increasingly included as local people, some of them involved in government (e.g. village mayors), wanted to talk about the problems of the area through a medium that was appropriately intimate. (It should be noted here that France has never had anything like the proliferation of local radio stations that exists in the U.S. TV and radio have come under almost total state control.)

The **Journal Parlé** organised the bulk purchase of 100 cassette players (at 256 francs each — approximately $50). A subscription to the service costs 150 francs for 12 monthly issues and 200 francs for people living outside the Pays Plinn. With a circulation of 400, the **Journal Parlé** is self-financing. Richard and his associates also formed the Atelier Regional de Communication Orale (regional workshop for oral communication), which hires out studio and tape-copying facilities to other groups, particularly those which have started their own cassette newspapers. One of these is in the Mené area (described below). Through offering this service the Lanrivain team now have an annual surplus of about $18,000.

Some of this sum was used to help start Radio du Centre Bretagne, one of the several new *radio autonomes* or free radio staions which have grown up since the Socialists took over in 1981 and opened up the airwaves. There are now 15 autonomous radio stations in Brittany, 12 of them based in rural areas — a complete contrast to the days of the state's radio monopoly. The free stations are joined together in a powerful federation that has played a pioneering role in drawing attention at the governmental level to problems specific to radio outside metropolitan areas.

The staff of Radio du Centre Bretagne are not professionals; all work in the community in some way and are therefore in close touch with the area. The station takes a flexible attitude to language. René Richard explains: "We want to make our broadcasts as inclusive as possible, while retaining some linguistic identity. We don't want to be a language ghetto. So, as in the *bistrots*, there will often be a mixture of French and Breton. It will be people's everyday form of speech, not the official Breton broadcast on the state's radio stations, a manufactured language which cannot be understood by the majority of true Breton speakers."

The **Journal Parlé** and Radio du Centre Bretagne keep the community's sense of place alive. The cassettes, clearly popular, are the subject of frequent comment in the bars and shops. In Lanrivain, the journal has helped stimulate the idea that the community can find its own solutions to local needs, most particularly to unemployment. The mayor of Lanrivain, working closely with the Syndicat Intercommunal, a joint group representing a number of villages in the *pays*, is continually promoting the creation of new small businesses. The village no longer waits for central government to provide all the answers.

In economic terms, the Pays du Mené, lying about 40 miles to the east of Lanrivain, is very similar to the Pays Plinn. It has, however, its own quite distinct language, *Gallo*, an archaic form of French, its own dances, and a devotion to the *vielle* (hurdy-gurdy) rather than the reeds that accompany the Breton dances.

The Mené has been the cradle of one of the most unusual experiments in contemporary European banking. Firmly rooted in the *pays*, which until recently was hardly known beyond its own boundaries, it should go a long way toward financing the small businesses without which the region will gradually die; the project will tap local resources which would otherwise be syphoned out of the area in the form of personal savings invested in remote banks or other financial institutions.

The Mené consists of 26 communes (or village-based administrative units) held together by a feeling of being peripheral to the market towns that surround them. The story of the Mené is typical of most rural areas in the industrial world: the total population, 28,500 in 1975; had dropped by 1000 since 1968. Nearly half the workforce of about 11,000 are employed outside the area. There are a few small businesses, all of which find it extremely difficult to borrow money, and there is little to attract new enterprise. The fate of the Mené has been radically changed by the quiet but dynamic leadership of one man, Abbé Paul Houée.

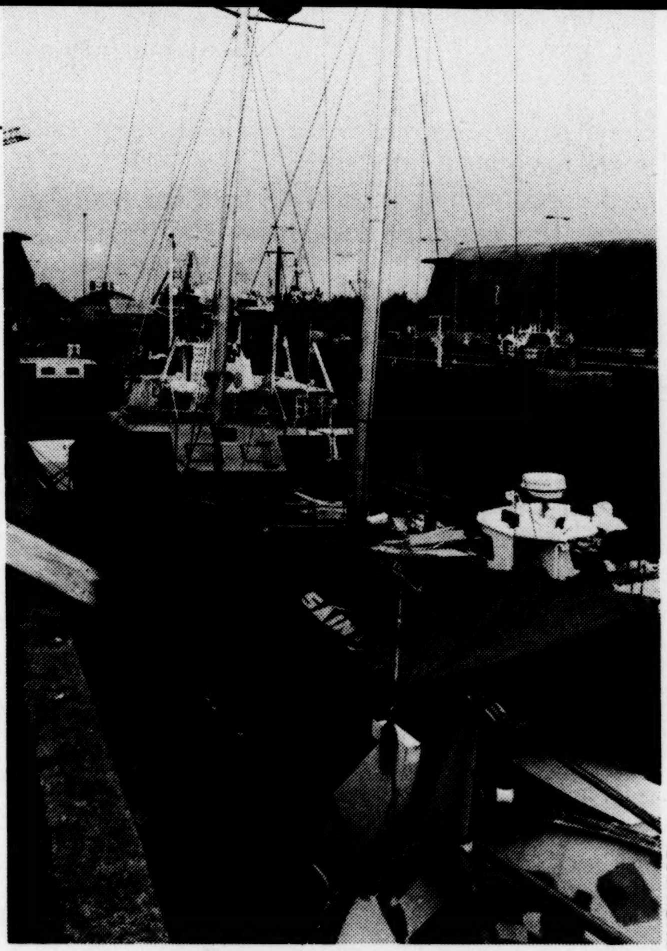
Elected mayor of St. Gilles-du-Mené, one of the villages in the heart of the area, Houée used his position to encourage greater cooperation between the communes of the region. While the Mené was, on one level, bound together by what one community worker described to us as a "community of misfortune," the mayors of each commune have jealously guarded their independence, each of them embattled in solitude against the highly centralised machine of French government and the strict ministerial controls imposed through the *départements* and the *préfets.*

In response, Houée and a group of local people created the Comité d'Expansion du Mené. It worked hard at promoting the *pays* as an antidote to the impersonal administrative structures created after the French Revolution. The work was slow and hard, but over the years it has acted as the catalyst for a number of new initiatives, the creation of farmers' and craftsmens' groups, new business enterprises, and a wide range of social and cultural work. "Minds were changed," we were told; people gained strength from the sense of belonging to a *pays* and beginning to see radical ways of implementing ideas about self-help.

The "local bank" is a clear reflection of this change of consciousness. All the investors will be local people. The great obstacle to the idea of *l'épargne locale* (local saving) has always been the risk of investing in an economically disintegrating area. The Mené group found what appeared to be a unique solution, which would provide the necessary guarantees for all those willing to invest in the *pays.* Local savings will be placed with the Institute du Development Economique du Mené, a small banking institution which they will jointly control. The term of investment will be three to five years, with a minimum interest rate well above the standard level. Borrowers, who will have to be entrepreneurs whose business schemes prove acceptable to a committee of local officials and representatives, will pay 2 to 3 percent less than the conventional rate.

What will make it possible for the new bank to provide such undeniably favourable terms is that it will not be aiming to make a profit. Its sole aim will be to serve the community while remaining economically viable. The French government, however, in spite of the Socialists' electoral commitment to massive decentralization, seems to fear any precedent that reverses the flow of money towards the nation's capital. This fact, it appears, has not escaped the attention of the technocrats in the Ministry of Finance, who are at present blocking the whole venture.

The renaissance of the *pays* that lies behind the successful local initiatives in the Pays Plinn and the Pays du Mené owes a great deal to the work of the Comité d'Etude et de Liaison des Intérêts Bretons (CELIB — the Committee for the Study and Liaison of Breton Interests). CELIB was created in the 1960s as a means of bringing together some of the very disparate groups, organisations and individuals working towards greater Breton independence. Under the secretary-generalship of Bernard Le Nail, links are gradually being formed between the various strands of Breton nationalism. Le Nail has also vigorously supported the activities of various groups involved in alternative technology and has been the prime mover behind a scheme to save something of Brittany's floundering fishing economy.



MARK KIDEL

The Eole, the first of the three sail-powered fishing boats built at Lorient, the large harbour on the south coast of Brittany. The large concrete buildings in the background are the totally indestructible bunkers that were built in World War II to shelter German U-boats while under construction.

In 1981, two sail-powered fishing boats were launched at Lorient, with an official send-off that included top government men, Breton nationalists, and environmental activists. Sails had not been used in French fishing for over 20 years. The situation, however, changed radically when the price of a litre of petrol rose from 12 centimes in 1972 to around 1.30 francs in 1981. The price of fish had not risen by anything like the same amount.

In 1979, Commander Francis Pahun, a former captain in the merchant navy, and former deputy director of the fishing harbour at Lorient — the second largest harbour in France — teamed up through CELIB, with a naval architect, Hervé Gloux, curator of the fishing museum at Concarneau, who had thought up the idea of building a new type of sail-powered tuna-fishing boat.

The final plans and models were completed in April 1980, and by June, two *patron-pêcheurs* (owner-fishermen) from the port of Etel in the Morbihan put in orders for the boats. These boats have very little in common with traditional sailing craft. The sails are made of tergal, the masts of aluminum, the rigging of nylon and the hull of polyester. Only one man is necessary to maneuver the boat. The rest of the six-man crew are free to look after the fishing. There are two small back-up engines, one of 150 horsepower and the other of 50 horsepower, driving an alternator and a hydraulic pump. Boats of the same size normally require 400 to 500 horsepower. The main engine was designed for harbour maneuvers and times without wind.

The Lorient boats were not designed to trawl, but they were designed for the greatest flexibility within a range of other fishing techniques. These include line fishing, small nets, pots, and what the French call *la pêche à la palangre,* with lines of 30 to 40 kilometres hung with thousands of hooks. Most of these techniques spare young fish, and the promoters of the project described sail-powered fishing as *la pêche douce* (or 'soft fishing') because of its concern for the stock of fish off the coasts of Brittany and the use of renewable resources.

Eole's first season was, unfortunately, near disastrous, particularly as it was being watched by the project's pro-high-tech critics. However, in the summer of 1982, both ships were remarkably successful, with catches as good as any from oil-powered trawlers of the same size, but comparatively minimal fuel bills. One ship is now operated by a fishing cooperative from Etel, the other owned and operated privately. The French government, however, has been singularly unhelpful, and Le Nail was told by the man responsible for developing sources of alternative energy for shipping that there was no interest in the boats.

It is no coincidence perhaps that the idea of sail-powered fishing boats grew out of Breton soil. There exists in the region a sense of fierce independence bred from neglect, misunderstanding, and sheer distance from the capital. In the days when progress was the rage, Brittany's inward-looking conservatism, a sense of continuity which we are only just beginning to value, was ridiculed by the "forward thinking" politicians, scientists and technocrats of the capital and their many eager camp followers in the provinces.

But Brittany's "backwardness" may be a blessing in disguise — just as the fading glories of the vast capital and industrialised areas of France may prove impossible to revitalize. The infrastructure of tradition remains as a foundation in those parts of the planet which have not been totally transformed by progress.

Although the cause of Breton identity and self-reliance is well served by appropriate economics or technology, it will be some time before the overlap becomes a true community of interest. It is painfully clear that the mainstream of the tide is still working against the survival and viability of Breton culture in its broadest sense: the population of villages is still declining, the equation between dying Breton speakers and children entering the ambitious Diwan programme is still far from balanced, let alone demonstrating the start of a linguistic renaissance.

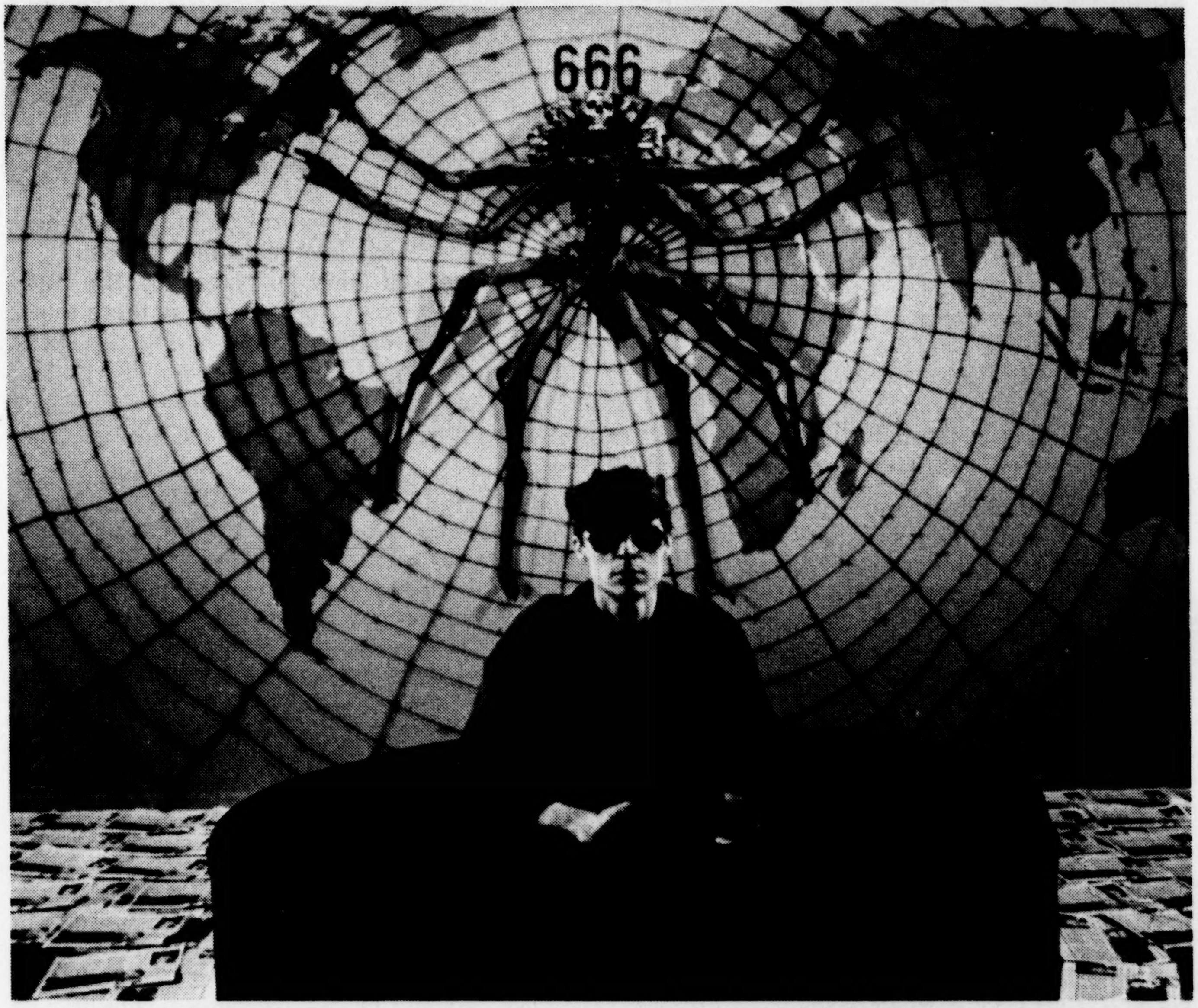
Tourism, which I have hardly mentioned, continues to be a very mixed blessing, for as well as providing a seasonal injection into the economy, it also treats tradition as an artefact, as entertainment to be recorded or consumed. The greatest hope lies in Brittany's most underprivileged areas, in places like the Pays Plinn and the Pays du Mené. It is there that the sheer desperation bred by need can be transformed into hope, and it is there that the web of tradition and community survives strongest.

When I last spoke to Bernard Le Nail, the great surge of optimism which had characterized him and others at the time of the Socialist election victory in 1981 had been transformed into something close to bitterness. The French government had gone back on its promises regarding the development of nuclear power and decentralization. There had been one or two steps forward, such as the freeing of the airwaves for the *radio autonomes,* but the Socialists have proved as centralist and metropolitan-minded as any other political party of the right or left. It has been hard for the Breton movement to accept that the spirit and power of place is not a right/left issue but one related to ideas about scale, tradition, and hierarchy. A look at French history, and particularly the French Revolution, might have warned them about the radical lust for centralized control.

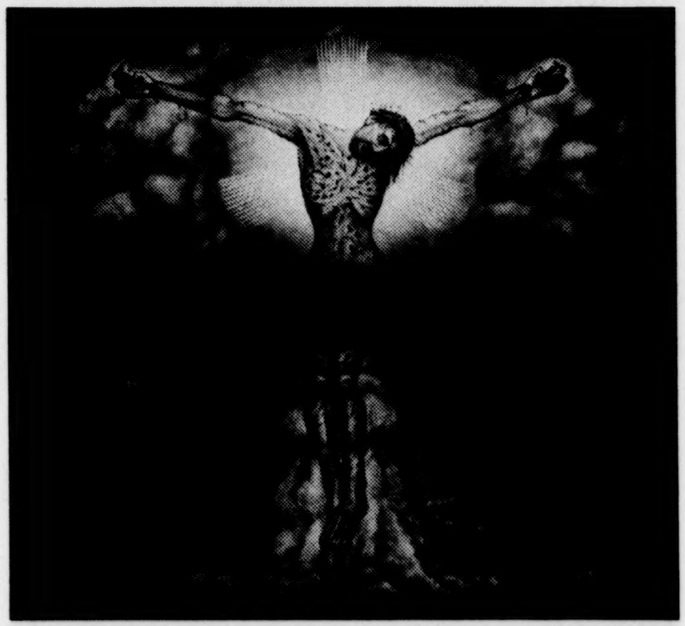
Kim and I returned to Devon greatly invigorated, almost envious of the strength we found in Brittany, for the local cultures in our own county have been allowed to disintegrate much further: the songs have almost totally vanished, and the few dances left have become curiosities. A sense of belonging to a place — which always encompasses action — depends on the vitality of not just *ideas* but the continuing interaction and inseparability of culture (dance, music, stories, crafts, ways of talking, spirituality, and morality), economics, and politics. It is something that cannot be manufactured, for it grows very slowly, perhaps too slowly for the pace from which we seem unable to escape. ■

Victim Nightmares, Sacred Mirrors

recent performances and paintings by Alex Grey



The Beast, April 4, 1982, P.S. 1 Gallery, Queens, New York.



Nuclear Crucifixion, 1980, 9½'x10½', oil on linen.

The Beast

PALM SUNDAY AFTERNOON, I sat behind a black desk dressed as a soldier and stamped hundreds of people's hands and foreheads with the number of the Beast (Satan), 666, as set forth in Revelations of the New Testament. My chair was half inside of a pool of black liquid. Reflected in the black pool was the wall installation of a charred eight-armed, seven-headed spiderlike "Beast" holding guns and knives. "The Beast" was constructed out of a

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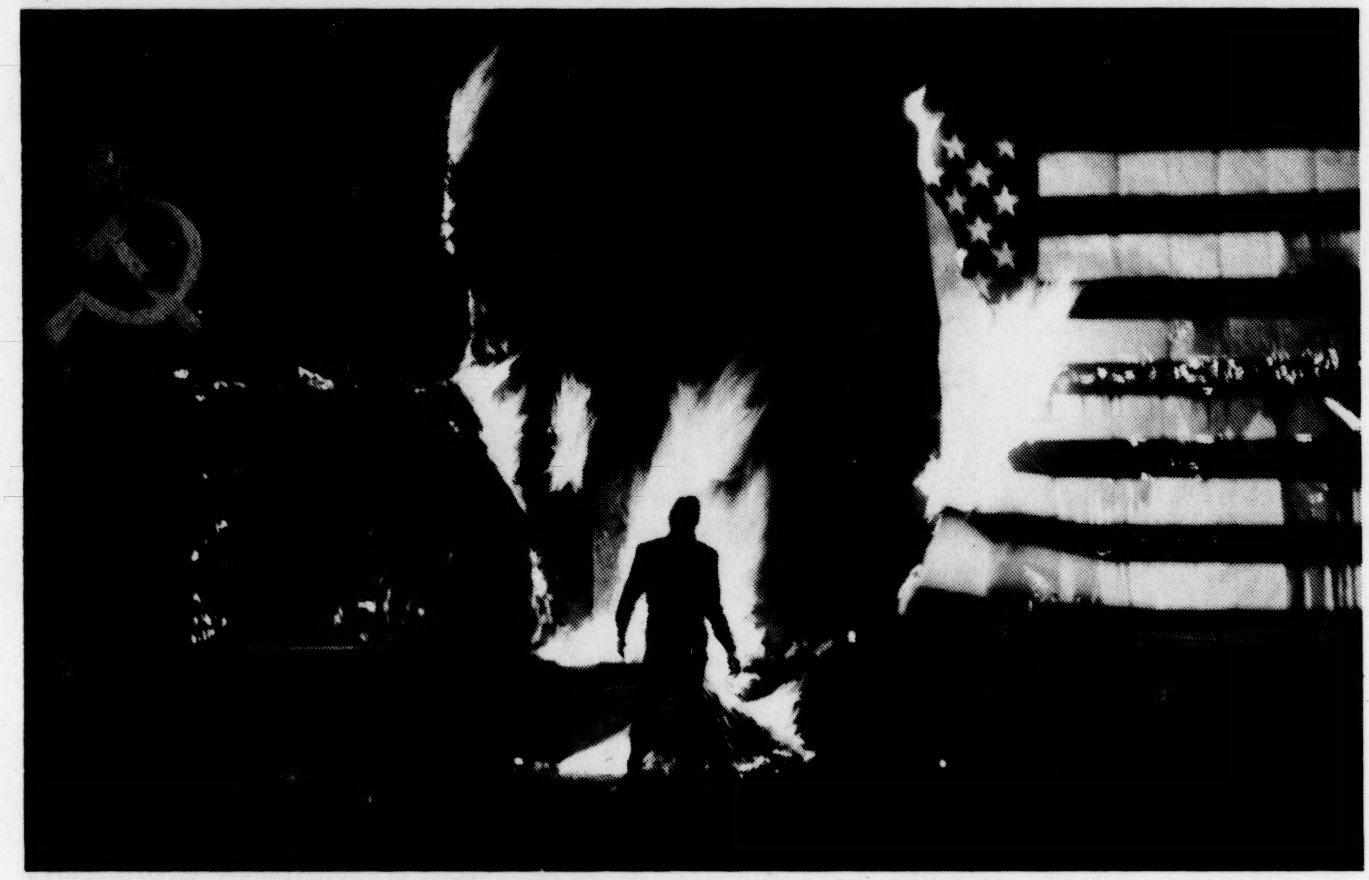
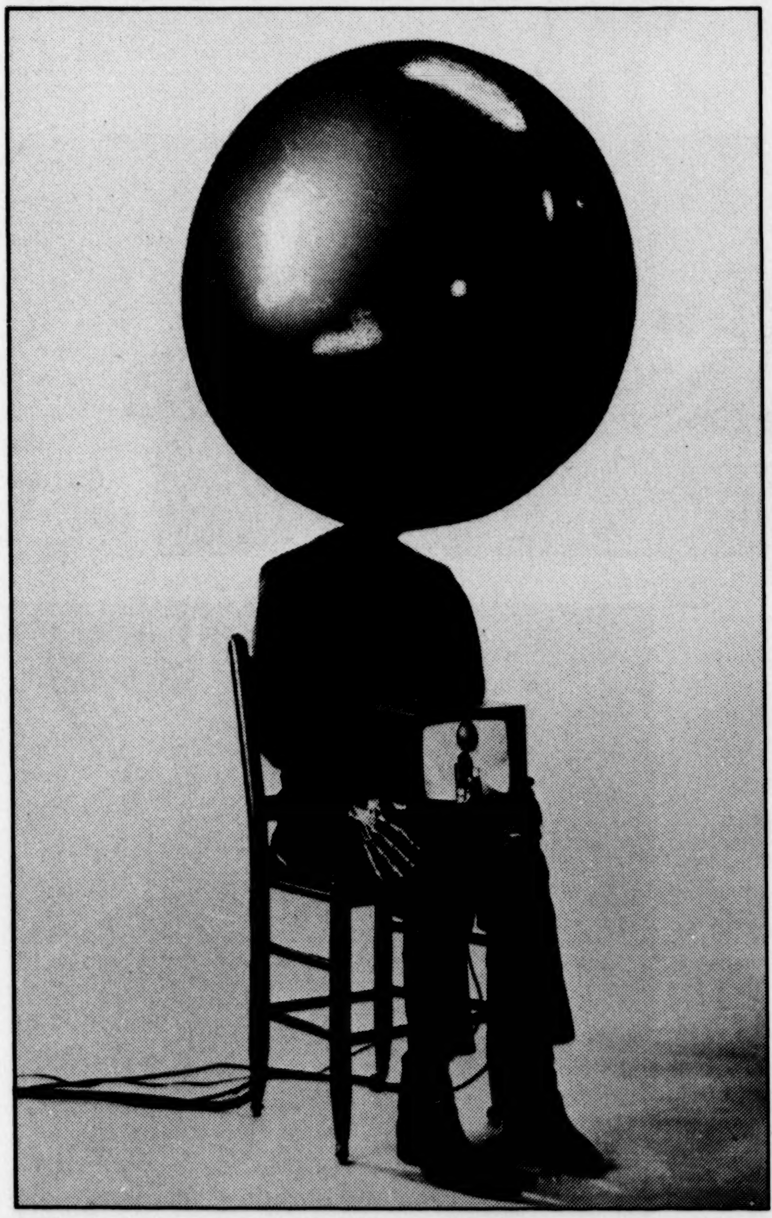
Since his last appearance in these pages ("Polar Unity," **CQ** *Winter 1978), Alex Grey's work has become more topical, more haunting, and more widely known. Here's a brief update/retrospective, assembled by Alex; there's more on the back cover.*
—Robert Horvitz



Mutually Assured Destruction, February 15, 1981, Boston, Massachusetts.



World View, May 18-20, 1981, Boston Film/Video Foundation.

human skeleton and six sheep skulls, and was hung on a large barbed-wire spider web over a red map of the world. The sound of a civil defense siren, a nuclear explosion, and Handel's *Messiah* was repeated at high volume for five hours. The floor was stacked with hundreds of newspapers, the headlines reading, "Hiroshima Survivors Testify Before Senators." Projected on another wall was a film loop of a rosy hydrogen bomb blast taken from above the clouds. On the wall opposite to the "Beast" was a large (nine and a half feet by ten and a half feet) oil painting of a Grunewald-like Christ crucified on a mushroom cloud over a burning ruined city.

Mutually Assured Destruction

I threw gasoline at a 12-foot by 36-foot painting of the Russian and American flags and then set it on fire. The flags completely burned to a pile of ashes.

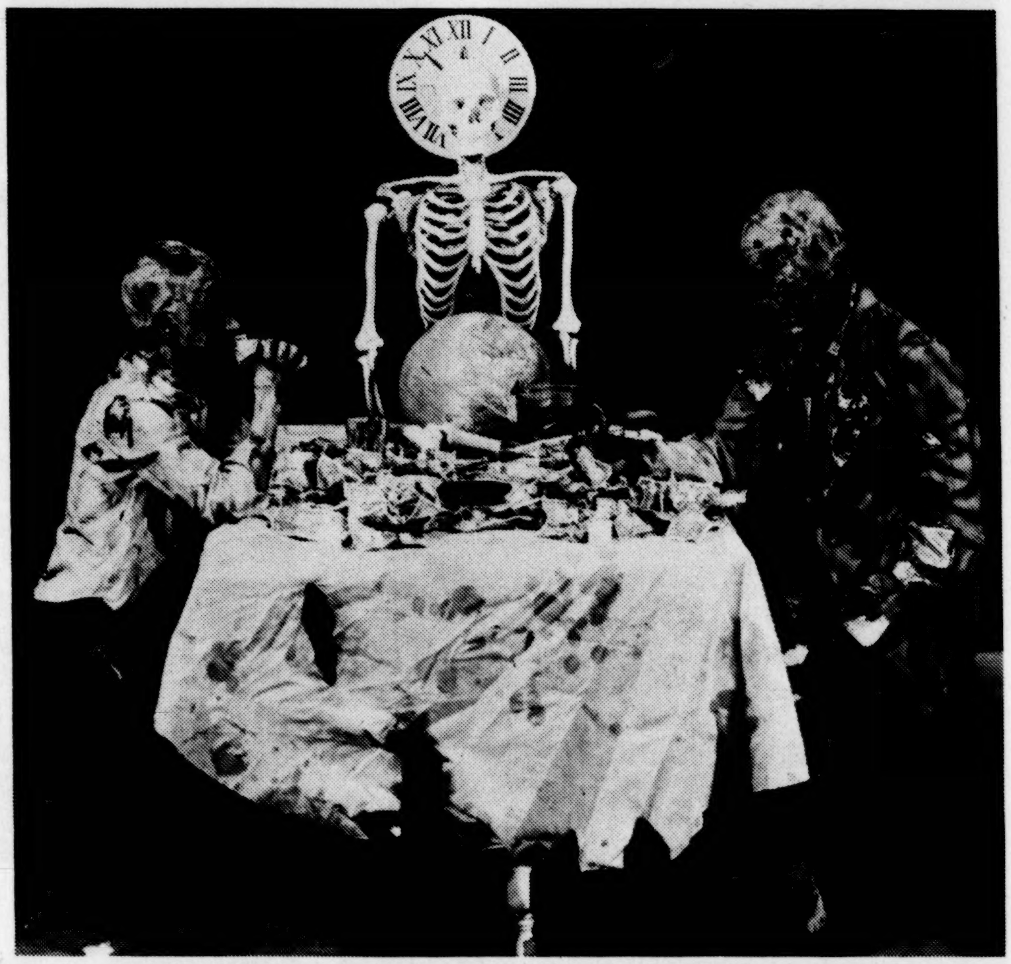
World View

I pushed onto stage a black headless figure with a closed-circuit TV on its lap. A black balloon emerged from the neck. The air hissed loudly, inflating the balloon until it reached more than six feet in diameter. Then it exploded.

Program notes included the following quote, delivered by Dr. Robert J. Lifton at a conference on the medical consequences of nuclear war: "Today we each live a double life. We pursue our individual careers, yet we know at any moment our entire civilization may be leveled."

Waste Land

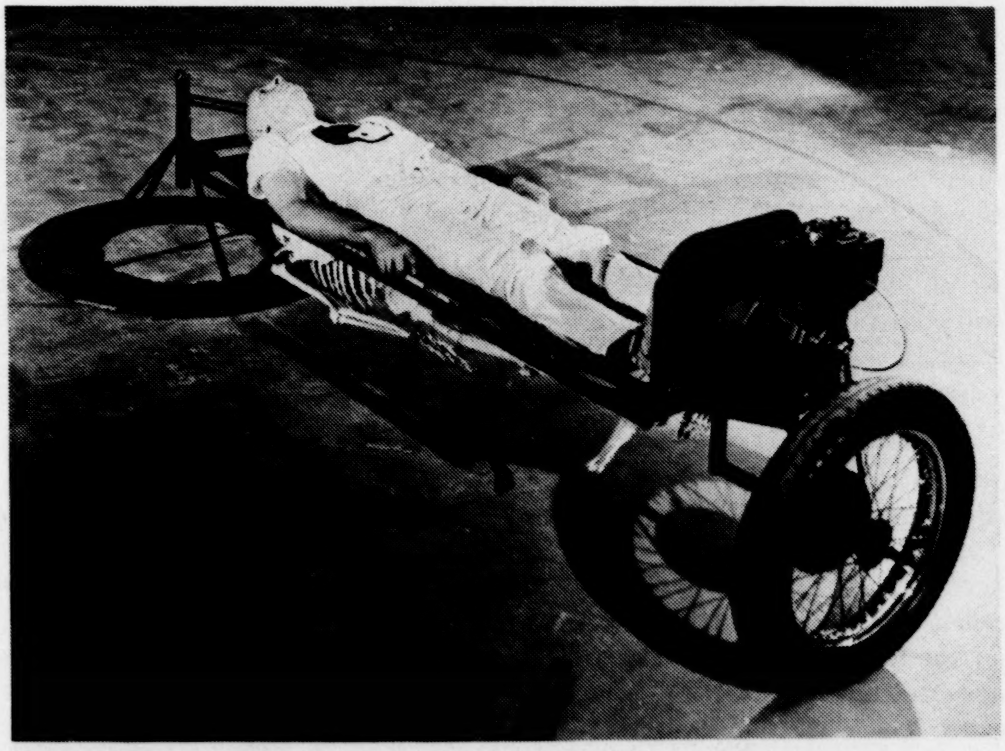
Mr. and Mrs. X are on their way to dinner when they are surprised by a nuclear blast. With their faces and clothes scorched and bloody, they arrive in hell at a dinner table covered with money. A skeleton with a clock halo, already seated at the table, holds a globe while an alarm bell rings madly in its rib-cage. Mr. and Mrs. X begin eating and burning the money and drinking blood. They seem oblivious to the sounds of air-raid sirens, bomb blasts, and alarms going on around them. Suddenly Mrs. X awakens, stands up and turns back the clock. She turns off the alarm and vomits up the money, then leads Mr. X to do the same.



Waste Land, May 7, 1982, Vehicule Art, Montreal, Canada; performed with Allyson Grey.

Human Race

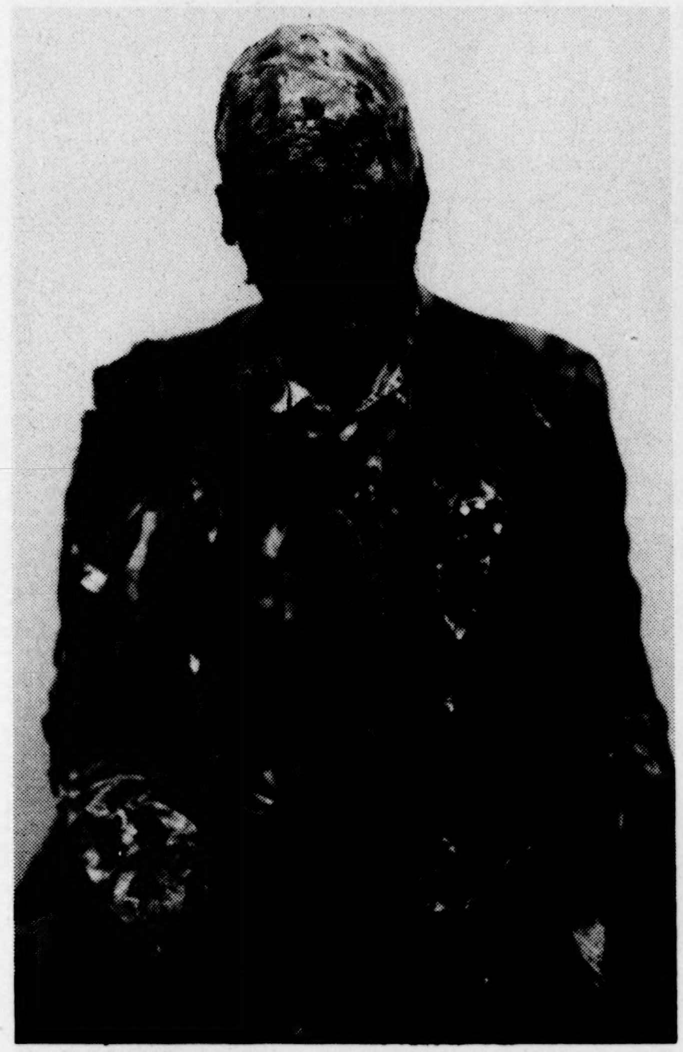
A special gasoline-powered circular-drive vehicle was created for the Human Race performance. The base at one end of the device and at the center of the circle was bolted into the concrete floor with lead anchors. The machine was equipped with a throttle to be hand operated from a supine position. A skeleton was suspended below the radial bed.



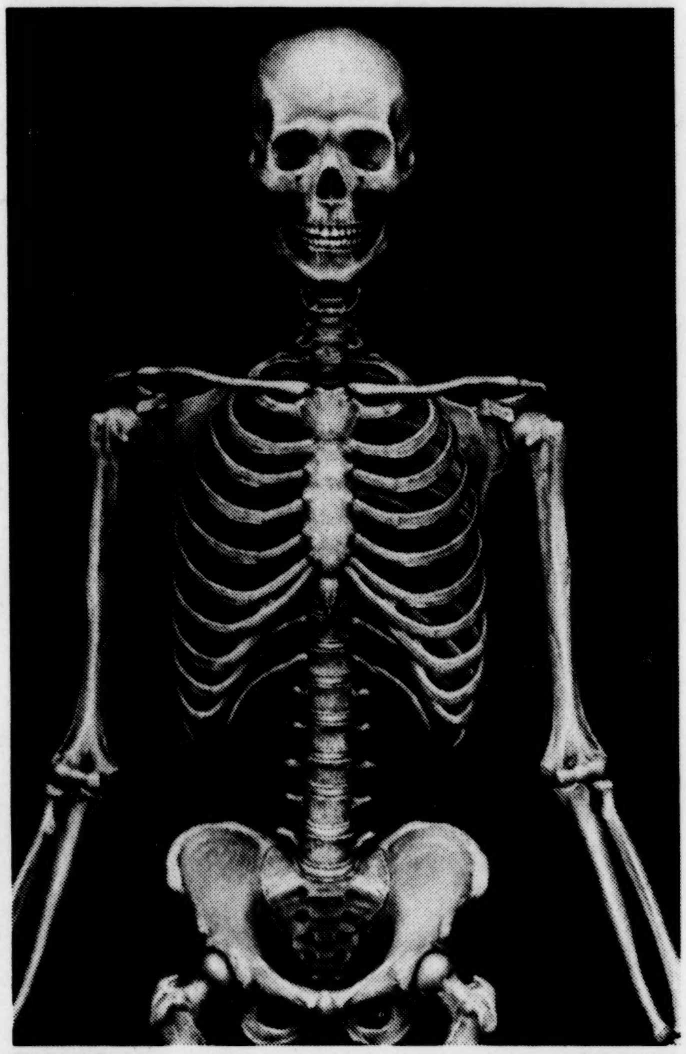
Human Race, April 17, 1982, Overland Theatre, Boston.

The audience sat within about two feet of the circle. Dressed in white, with a yin/yang T-shirt and shaven head, I entered the space and pull-started the engine. The engine was very loud and filled the space with the smell of gasoline. I laid down on the machine, engaged the clutch, and it started rolling. It spun at a high rate of speed for about a minute, then died. The machine coasted to a stop, I got off and pull-started it again. The engine failed a number of times before it finally started runnning smoothly. I laid back down on the steel bed and started the wheel rolling. The vehicle accelerated quickly, spinning around the circle at 25 to 30 m.p.h. Suddenly, the base ripped out of the concrete. The machine was out of control heading toward the audience. Everyone screamed. The machine stopped when I killed the engine and stood up.

I would like to thank Alan Michel for collaborating with me on the design and engineering of the vehicle and for his fabrication of the machine which I commissioned him to build.



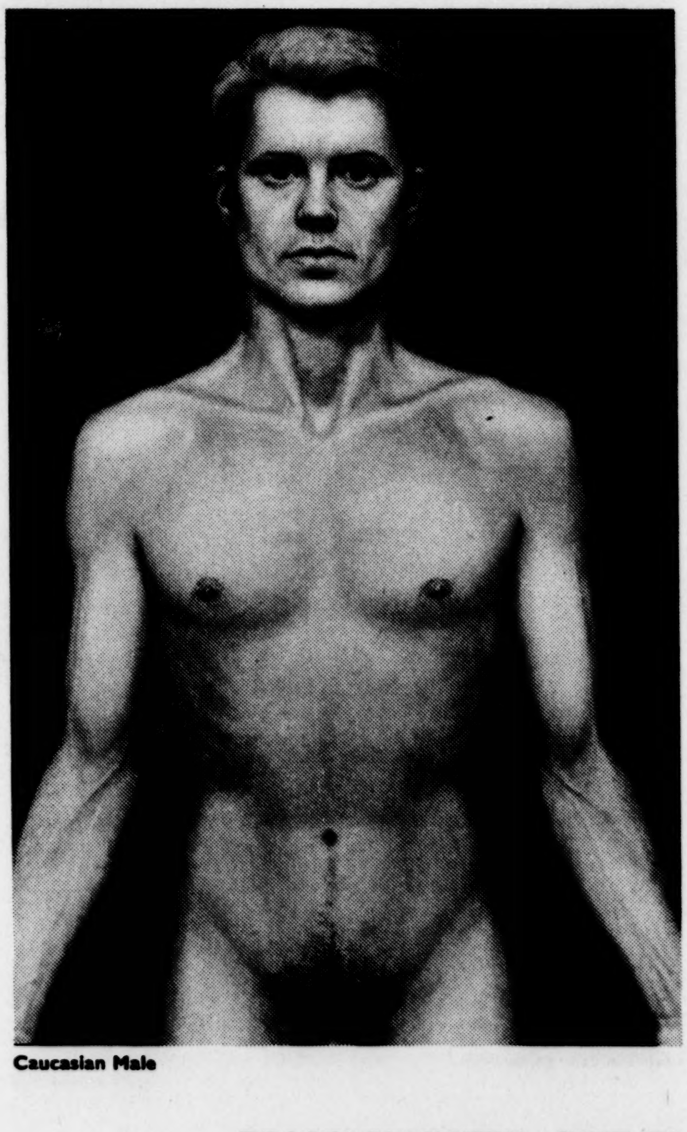
Alex Grey, from **Waste Land.**



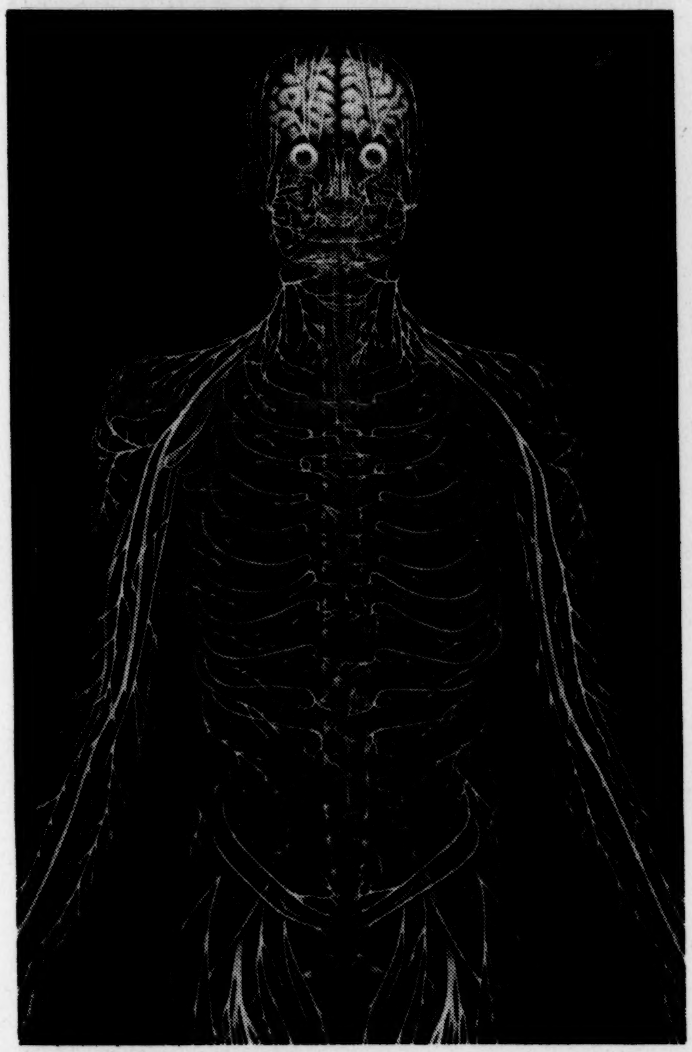
Skeletal System

Part of me wants to turn a deaf ear to the public-interest groups' and the media's repeated reporting of scary nuclear statistics and new missiles and new bombers . . . but I know that the defense departments keep building up radioactive arsenals aimed at each of us — so we all have to integrate, live with, and do something about the demons of nuclear war. Most of my recent performances seem like victim nightmares. Some of them contain sparks of hope, but most are just elaborate despair.

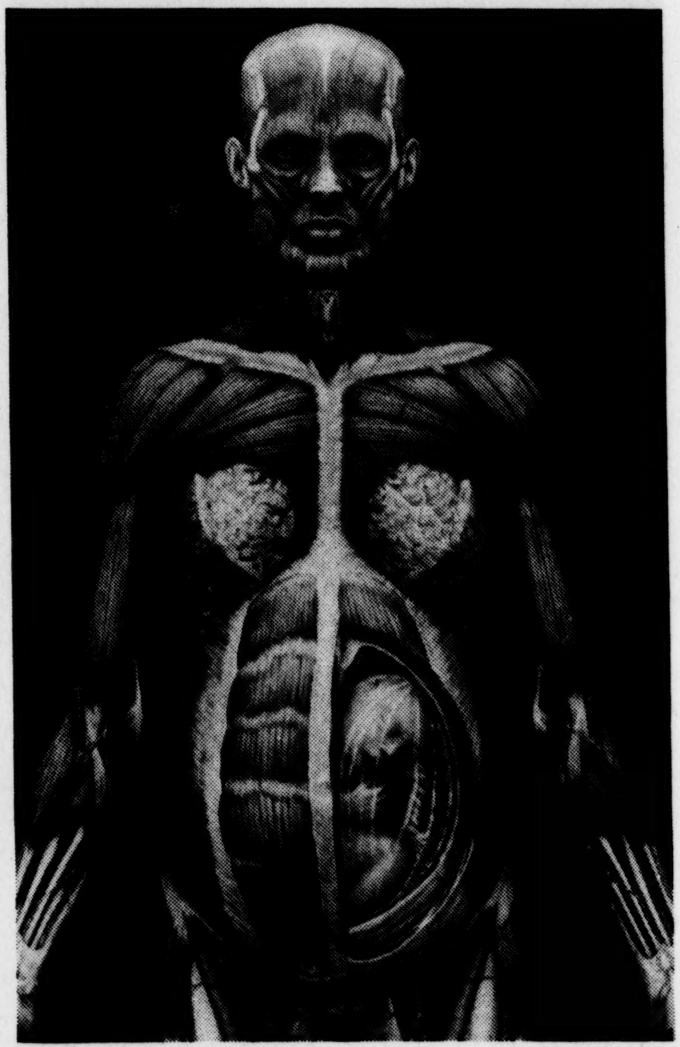
Simultaneously, I have been working on a series of paintings that could be considered "positive." The Sacred Mirrors (of which six are shown here) are 20 life-sized portraits (four feet by seven feet) depicting the various complex anatomical systems of the body (skeletal, nervous, cardiovascular, visceral, etc.), the races (male and female), the psychic and spiritual energy systems, and some archetypes of the world's religions. The viewer is intended to stand in a prescribed zone in front of the paintings and "mirror" the images. The Sacred Mirrors ask people to identify with and appreciate healthy and universal aspects of humanity. For me, the paintings provide a counterbalance to the performances which reflect sickness and crisis. ■



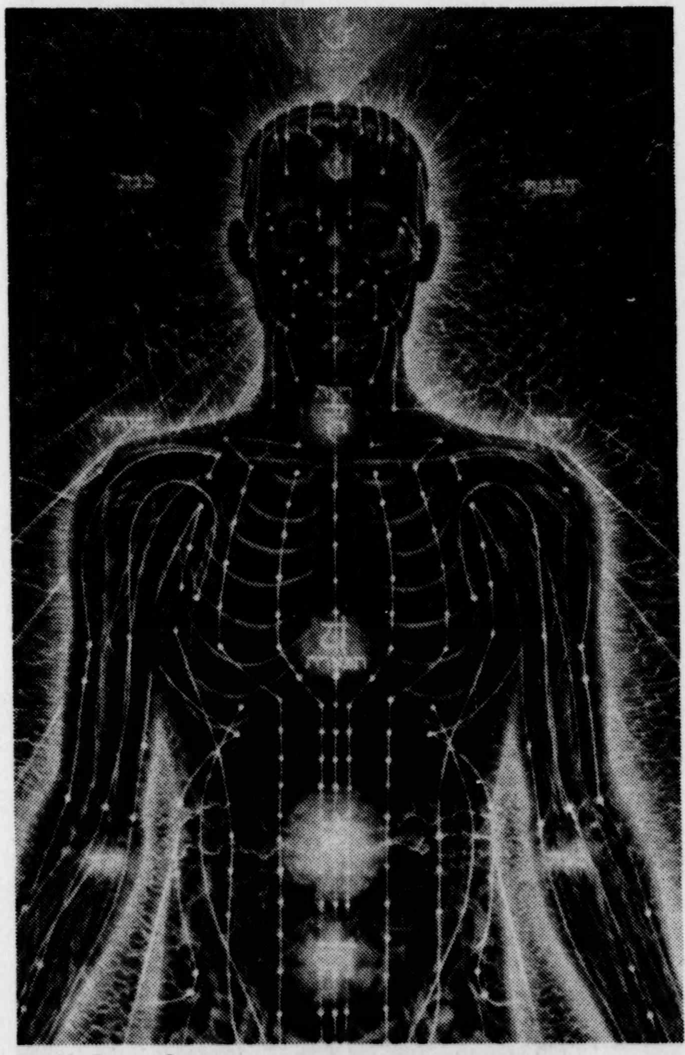
Caucasian Male



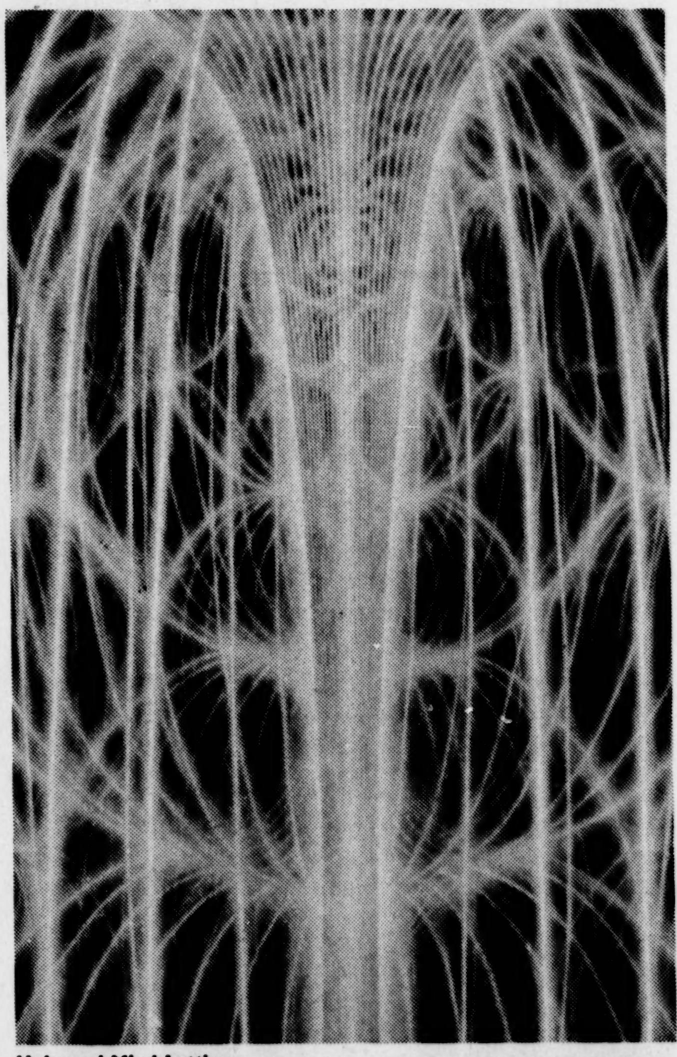
Nervous System



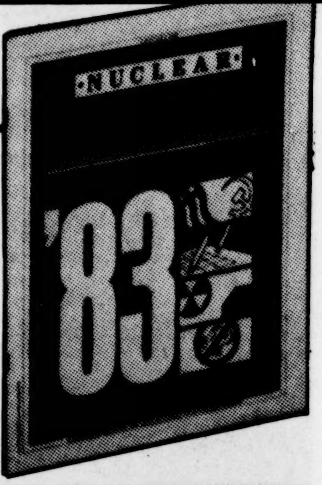
Muscle System (pregnant female)



Psychic Energy System



Universal Mind Lattice



Nuclear Times

Last June, I blockaded the Lawrence Livermore Laboratories and spent 48 hours in jail. Despite the solidarity and optimism of 1200 arrestees, there were nagging questions: Is this worth it? Are we doing anything **really?** *Washington,* **are you listening?** *By the time I finished leafing through this magazine, I felt a renewed confidence in the growing grassroots opposition that I was a part of; it answered, "Yes — you did make a difference. Keep up the good work."*

This is the first magazine to provide comprehensive, in-depth coverage concerned **solely** *with the anti-nuclear-weapons movement. The pages are brimming with useful and diverse information about: the effects of our actions on Congress; ways to resist war taxes; anti-nuke rallies and The Movies; which Red-baiting editors are crying "Soviet plot"; and on and on. If you want to declare your home or cat or garden a "nuclear-free zone," or if you want to know what England and West Germany are doing to protest deployment of Pershing II missiles, it's in here. And if it isn't in here, the magazine provides you with a list of nationwide contacts for information, and a calendar of upcoming events for each state.* *—Bob Klein*

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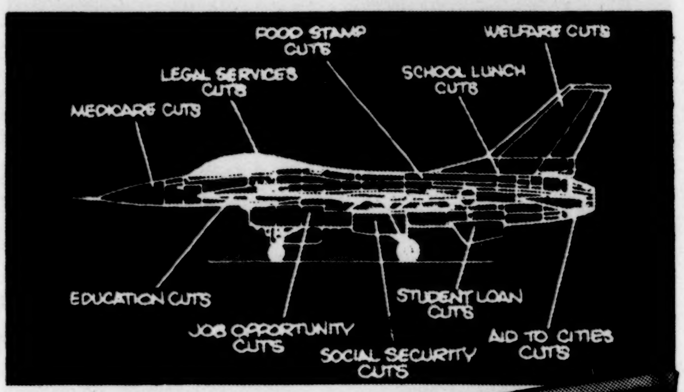
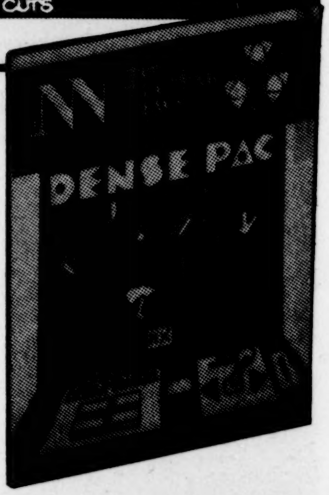
Greg Mitchell, Editor
$15 /year (10 issues)
from:
Nuclear Times
Room 512
298 Fifth Avenue
New York, NY 10001



No Nuclear News



No Nuclear News is close to being a mess. It's a clipping service of stuff from all over, reproduced as it was originally printed in the* **New York Times** *or your local underground rag. Lots of stuff and lots of different kinds of stuff. It gives the feeling that nuclear bad things and good opposition actions are bursting out all over with no way to tell who's winning or what's next. In other words,* **NNN** *seems very true. It is somewhat hard to read until you get used to it because of the variety of layout styles. It's worth the effort though. There's always a good news or bad news surprise that you haven't heard about elsewhere. And* **nasty** *cartoons. Nukes are better than Nixon for vicious humor.*

No Nuclear News *started out being anti-reactor, expanded into anti-weapons and just recently has started including what it calls ecocide — the various and sundry poisons being left about. It's useful to see all the stuff about clever technology biting back in one place. It's also useful to be able to show people you're arguing with (or educating) mind-staggering items straight from the* **Des Moines Register** *or* **Christian Science Monitor**. *—Anne Herbert*

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$10 /year (six issues)
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World View 1983

If you've ever been frustrated by picking up a standard world almanac and trying to derive a coherent overview of a country or region from the morass of statistics and mushy summaries therein, **World View 1983** *may be the answer.*

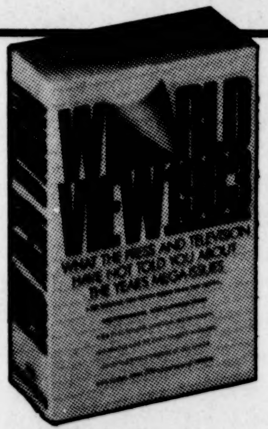
An intelligent array of briefings on international conflicts, hot spots, trends, and events (circa 1981-82) as well as succinct rundowns on 34 major countries and all regions in the world make this 500-page book a better buy than almanacs with twice the pages.

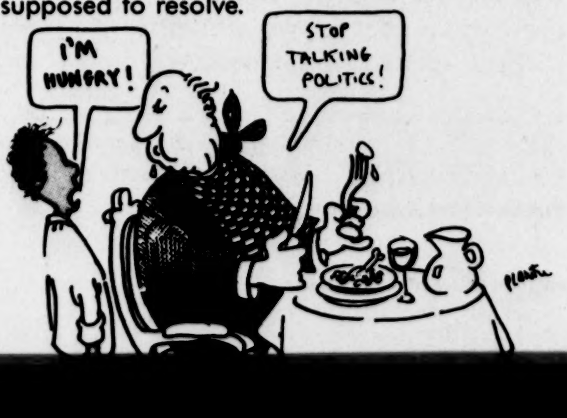
Much of the writing in here is derived from the French **L'Etat du Monde** *yearbook supplemented by reports from English and American writers. If you value the worldview which informs the* **Manchester Guardian** *or* **Le Monde** *or* **In These Times** *(i.e., a left-critical appreciation for complexity minus rhetoric), this yearbook will more than make up for all those newspapers you never got around to reading last year.* *—Jay Kinney*

•

The [Northern Hemisphere's] real responsibility for malnutrition in the South stems from the fact that its economic, political, and military aid to ruling minorities serves to buttress the social status quo that breeds poverty and exploitation. Direct aid to victims of hunger, though seemingly effective in the short term, often gives aid and comfort to the existing regimes in the long run, heading off any challenge to their privileges and perpetuating the very problem that food aid was supposed to resolve.

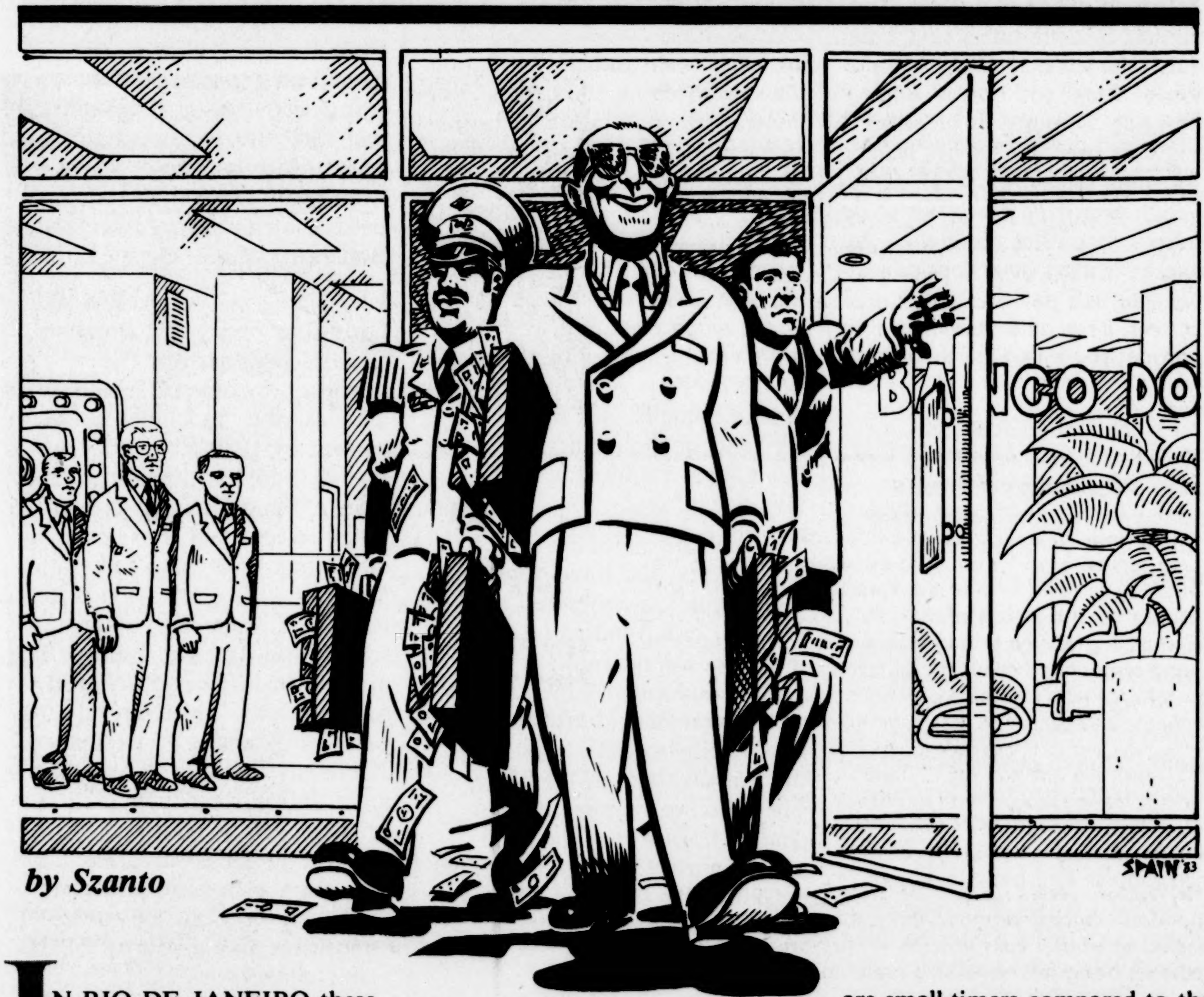
World View 1983
(What the Press and
Television Have Not
Told You About the
Year's Mega-Issues)
Francois Geze, et al.,
Editors
1983; 500 pp.
$10.95
postpaid from:
Pantheon Books
Random House
400 Hahn Road
Westminster, MD 21157
or Whole Earth
Bookstore




I'M HUNGRY!
STOP TALKING POLITICS!
PLANTU

The Biggest Bank Robbery in History

REAL INTELLIGENCE



by Szanto

IN RIO DE JANEIRO these days you don't stop for red lights. If you think there's danger you slow down, but you don't stop. Until recently, a car standing still at a red light meant a hold-up in progress. Banditry has become a way of life in one of the most beautiful cities in the world. Foreigners are actively discouraged from walking the streets or sitting on the miles of sand of Ipanema and Copacabana. But if you must do so anyway, then don't wear a watch or jewelry and don't carry money. The bandits have come down out of the *favelas* (slums) that creep up the granite domes that contain Rio between them and the sea. But these bandits are small-timers compared to the bureaucrats, bankers, and businessmen who are about to carry out a $90 billion bank robbery.

If the international bankers' confidence is weak now, wait till they find out that the Brazilians have no intention of paying their $90 billion debt on its current terms.

In the world of international banking Brazil owes more money than any other country in history — nearly $90 billion. It will matter to all of us whether we believe that Brazil can and will pay that debt. Surprisingly, it is very rare in finance to ask the question of whether a country will pay or won't. After all, the U.S. government has borrowed ten times as much from its citizens as Brazil has from the international system. The only meaningful question is how fast

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"Szanto" is the pen name of a multinational corporate maven who believes that the real intelligence that guides corporate decisions should be available to guide customer and citizen decisions as well. His reports are a regular feature in CoEvolution.
—Stewart Brand

you get paid back and at what interest rate.

Finance, whether for a company or a country, involves a continuous process of borrowing and paying back. Thus, such entities are always in debt — using other people's money, a service for which they pay interest. The amount of debt varies over time and the interest rates are a function of when you borrow and for what. If money is plentiful and your use of it carries little risk, then rates are low. If money is tight and what you want to do is risky then rates are higher. As long as lenders have confidence that you will pay them back, you can keep on borrowing, even though the cost of borrowing changes.

But when lenders lose confidence, the questions start. Not only can you not get more money, but if confidence really erodes, they want the rest back too.

Among all the so-called "developing nations" — an inappropriate tag, as we shall see — Brazil was the country the bankers felt most confident about. So even in the face of a global depression they kept on lending and Brazil kept on borrowing, until it was $90 billion in the hole. The bankers began to get weak knees and sweaty palms when oil-rich Mexico, the other "good risk," suddenly couldn't pay. But if their confidence is weak now, wait till they find out that Brazil has no intention of paying its $90 billion debt on its current terms.

To understand the impending crisis and what to do about it, we have to see how Brazil got where it is. Twenty years ago Brazil might have been called a developing country. Today you'd be hard pressed to tell Sao Paulo — a city of 12.5 million inhabitants — from Los Angeles (including the smog) or Rio from San Francisco. Even Brasilia, with its austere modernity, is a monument to a vision of the future. Sao Paulo state alone has a gross product of $100 billion (40 percent of the total product of Brazil). Brazil is really two countries: a modern industrial society concentrated along the southern coast, and the rest, a mix of agriculture, new development, and the frontier.

Brazilians are fond of the remark "Brazil has a great future, and it always will."

In 1964, when Brazilian inflation was approaching 100 percent, the generals stepped in. To get inflation under 25 percent they squeezed the economy, and it nearly collapsed. They followed much the same course as Reagan has, with much the same effect. Their vision of the future was Brazil as an economic and military superpower by the end of the century. And they've almost made it. But Brazilians are fond of the remark, "Brazil has a great future, and it always will."

The generals, aided by the technocrats, had three objectives: building an autonomous, modern, broad industrial base — including a large military industry; building a large number of megaprojects (dams, nuclear plants, biogas, etc.); improving the general standard of living. The first two required a great deal of borrowing. The third relied on the success of the other two. And for the most part they've succeeded.

One of the keys was import substitution. If you want to bring a car into Brazil it'll cost you tens of thousands of dollars. But you can buy a Brazilian-made alcohol-powered VW beetle for only a couple thousand dollars. In 1970 Great Britain made 2.1 million cars and Brazil less than half a million. By 1980 British production had declined by 700,000 cars per year and Brazil was nearly its equal with 1.2 million cars produced. Sao Paulo has five giant automotive manufacturing complexes — more than Detroit. In 1960, 97 percent of its exports were minerals, metals, and agricultural goods. By 1980, 58 percent were manufactured goods, with one of the fastest-growing components being military equipment.

In 1975, after the first oil shock quadrupled its oil import bill, Brazil launched a national alcohol program. Last year, using its biomass resources, Brazil was already able to replace 60,000 barrels a day of oil imports. Everywhere you go you can see Brazilian-made Chevrolets with the word *ALCOOL* on the back. On the Parana River, separating Brazil from Paraguay, they recently turned on the giant Itaipa hydroelectric plant. Between 1970 and 1980 Brazil more than tripled its hydro capacity. Where the world only gets on average 6 percent of its energy from water, Brazil gets about 25 percent.

Social progress was real as well. Forty-four percent of Brazilian families were earning the minimum income or less in 1970. That number had fallen to 18 percent by 1980. Over the same period those earning two to four times the minimum rose from 16 to 26 percent and those earning more than nine times the minimum had gone from 6 to 16 percent. The number of kids in school rose by eight million. The number of homes with water, sewerage, gas, and electricity went up by about 50 percent. Television sets and automobiles more than doubled. In 1982 the generals were loosing the reigns with the policy of *abertura* (opening). Free local and congressional elections led to the opposition taking control of the major cities.

Today inflation is back over 100 percent. In Sao Paulo 1500 people a day are losing their jobs. And the $90 billion mortgage on the Brazilian future threatens the world financial system and the world economy along with it. What went wrong?

Part of the problem lies in the huge increase in Brazil's oil import bill. All those cars they made — despite the alcohol program — need a lot of imported oil. Although Brazil increased its own oil production, it wasn't nearly enough. In 1970 oil was less than 10 percent of the Brazilian import bill, but by 1980 it was nearly half. To pay for it, Brazil had to borrow money and to increase exports, which meant more investment, which meant more borrowing. Of course the bankers who had gotten most of OPEC 's money as new deposits were happy to lend it to Brazil. After all, success breeds success. Brazil was the best risk of all. Two decades of success proved the competence and control of the military and technocratic elites.

Then the second oil price hike hit the world economy and shoved it into depression. With it came a collapse in trade and Brazil's export prices. Its export income started to fall. But Brazilians, the bankers, and most everyone else believed the depression would be short-lived, so the game went on, the debt mounted. Most of the new debt was no longer long-term debt for investment but short-term debt to cover immediate costs. Much of it came through the highly fluid and largely unregulated interbank lending system. The loans flowed toward Brazil more rapidly than anyone knew — the speed with which the debt grew and the level it reached surprised many bankers.

Meanwhile, in Washington, Mr. Reagan's economic policy led to ever higher interest rates. Short-term debt carries higher interest costs than long-term debt. A poor country qualifies for development loans at two to three percent. But a successful country like Brazil borrows from places like Citibank at commercial rates, which hit over 17 percent last year. By the end of 1982 the combined cost of oil and interest was taking almost 100 percent of Brazil's earnings from exports.

When Mexico nearly crashed last summer the bankers got scared, so they added a premium of a few percent to the ordinary commercial rates to cover the added risk. Rescheduling all those loans took a lot of time, so the bankers added another few percent — a service fee — on top of the rest. Finally, in December 1982, when Brazil could no longer keep up with the game, the International Monetary Fund (IMF) agreed to rescue the country by lending it $6 billion more to keep the game going. But IMF loans usually have conditions on them. Brazil had to cut government spending and drastically increase the ratio of exports to imports. In essence the money was being lent to Brazil to keep paying the banks, to keep their confidence up, not to finance growth.

> **If the IMF and the banks don't accept Brazil's terms, Brazil will walk away from the debt.**

Cutting government spending meant killing a number of huge projects, putting many people and businesses out of work. One route to meeting the IMF's second condition would be to increase exports, but that's easier said than done. The U.S., Brazil's biggest trading partner, is hardly growing, and is also struggling to keep Mexico afloat. Import restrictions like those imposed in Brazil have been put on Brazil's other trading partners in Africa, Eastern Europe, and Latin America. So expanding exports may not work.

The other route is to cut imports, squeezing all those businesses that depend on them. And that's what's happening. In the first few months of 1983 the trade balance has looked very good, but at the cost of 100 percent inflation (as people scramble to get what they can) and accelerating unemployment, especially in Sao Paulo.

Many of the bankers are confident that the world recovery will save the day. Interest rates will fall, decreasing Brazil's cost of borrowing. Trade will rise and export prices will rise with it, increasing Brazil's income. Falling oil prices will reduce that burden on Brazil. So why worry? The game goes on.

But the Brazilians aren't so confident. Oil prices are down some and may fall further, but oil's still expensive. Interest rates are still high. And while there may be tentative signs of a recovery in the U.S., the rest of the world is in far worse shape.

Thus there is a growing consensus in Brazil that it can't, won't, and shouldn't pay its debt. After all, the Brazilian economy is relatively sound and, aside from oil, relatively independent of the world. Much of Brazil's problem was the fault of OPEC, the Americans, and the bankers. Why should they destroy their economy to save the banks? Thus after a few more months of good trade balances Brazil will walk into the IMF and demand that its debt be restructured.

Rescheduling — what happened before — means a slight stretch out at higher rates. *Restructuring* means stretching out the debt for a long time at much lower rates. And if the IMF and the banks don't accept Brazil's terms, Brazil will walk away from the debt. Because everyone assumes that Brazil is the best bet of all countries, the blow to confidence would be profound and could collapse the system.

A number of proposals have been floated to restructure the debt of Brazil and the other debtor nations, but so far the resistance has been great. For the banks who loaned expecting to get their money back soon at high rates, the losses would be great if the loans were stretched out at lower rates.

But the bankers are wrong. The whole sytem must grow together. If countries like Brazil don't grow, the U.S., Europe, and Japan can't sell to them. In the last five years three-fourths of the new manufacturing jobs in the U.S. were for export products. Europe and Japan are even more export dependent. The industrialized nations need their trading partners in the developing countries. The reality of today's world economy is that there are very few countries that can act alone. Brazil may be one of those. That's why it's unlikely that Brazil would lead a debtor's cartel in a massive repudiation of the debt. It perceives itself as different and it probably is. But restructuring the debt for Brazil alone probably won't work. If the other nations think Brazil is getting off the hook, they will demand relief. While their position is weaker, the threat may be nearly as great.

Some form of global debt restructuring is needed. An agency akin to the IMF or World Bank must take over the debt mountain to provide relief to the debtor nations. Part of the cost must be borne by the shareholders of the banks. They had unrealistic faith in endless expansion, even in the face of an unstable world economy. Furthermore, as the oil companies made windfall profits on OPEC's oil price rise — which were taxed away — the banks made windfall profits on skyrocketing interest rates caused by U.S. policy. Some form of excess profits tax might help finance the global rescue. But unless it is carefully designed, the banks will become too conservative and some might even fail, neither of which would be constructive. The rest of the cost must be borne by the governments of the wealthy nations on behalf of all of us. A sinking world economy will drag us all deeper into depression and perhaps worse.

In the center of Rio there is a 2000-foot granite dome called the Corcovado. Atop the huge

three true stories

by John Benecki

BOLIVIA

THE TRUCK

We were riding in the truck to Tarabuko market. Crowded beside us on bags of grain between children and goats the men and women were wondering who we were.

"Who are those people?" asked the black-haired woman.

"Those people are the gringos," replied a middle-aged fellow who was proud sounding.

"What are they doing here?"

"They are here on their vacation," he answered wisely.

"What is a vacation?"

There ensued a long discussion on the concept of the vacation. The middle-aged man was obviously happy to have the chance to lecture and show off a bit. Suddenly the black-haired woman grasped the idea. She stared at us.

"They come *here* on their vacation?"

TIRAQUE

In Tiraque we lived in the home of the Catholic priest. The three nuns were unsure of us. It was obvious that we weren't Catholic but we had told them that we respected the Holy Virgin.

We ate eggs in Tiraque. As we were crossing the square to buy more, somewhere, two children saw us and ran into their home screaming in terror. Their mother came out the door forcefully and straight for us.

"I am so glad to see you," she said. "There are very large trucks which come through this square. They have no respect and do not slow down. I am very afraid that one day my children will be killed. I have told them that if they do not stay inside and away from the square that white people will come and eat them up. I would like you to run inside now and chase my children and scream at them."

We refused her for ten minutes and then walked away.

CHILE

SPRING

Spring was 16 and lived beside Lago Epuyen. Over the pine plantation that surrounded the lake and filled the narrow valley the Andes divided Argentina from Chile. Two years after the murder of Allende the police picked her up with friends for suspicious activities on the other side of the mountains.

"We arrived in a small town and found the shopkeeper very friendly until we asked for whole wheat flour. His expression changed; what did we want with it?

"We replied that we were accustomed to baking with whole wheat flour. 'I have none,' he said, and turned his back on us.

"We were very puzzled and went down the street to the other grocery. It was the same there and before we had finished the police arrived.

" 'We understand you are asking for whole wheat flour,' they said. We admitted that was true.

"They picked us up and we were questioned for a long time but finally released. It turned out that when Allende was in power he made the mills and bakeries produce whole wheat bread as it was more healthful. When the junta took over they enforced the production of white bread. We were mistaken for revolutionaries coming down from the mountains for supplies."

John Benecki is currently studying to be a physician assistant. In his letter accompanying these true stories, he wrote:

"When people hear about the goings-on in El Salvador it is hard for them to realize that it is happening to real people. The 'disappearing' in Argentina and Chile was largely of people who would be our contemporaries in this society. I think that your subscription list would be decimated had **CoEvolution** *been published in those countries at the time of my stories (1977) or even now . . . ."*

—Jay Kinney

rock stands a 100-foot-high statue of Christ the Redeemer. Sometimes the early evening mist shrouds the rock in invisibility. As the floodlights illuminate the outstretched arms of the Christ, the statue appears to float over the city, inspiring the faithful with the apparition of a miracle.

Finance, too, is a game of faith. But faith must be tempered by realism. The central lesson of this crisis is that the future is created by faith which matches our capacity to create what we imagine. But faith which becomes overwhelming and ill-considered confidence can be destructive if promises are made that cannot be fulfilled.

The Brazilians believe that if the system comes down they may be hurt the least of all. They may be right. If we don't help Brazil and the other countries like it, Brazil may well walk off with the $90 billion it already has got, leaving us holding the bag. ■

3RD WORLD SAVVY

Here are two tales from where the action is these days. Both are drawn from a computer teleconference I'm supposedly on the faculty of — "The Management of Scarcity and Abundance," this semester's subject of the School of Management and Strategic Studies, run by the Western Behavioral Sciences Institute in La Jolla, California. Both tales are by "students" in the conference.

The first comes from Rodrigo Halaby, a Colombian trained in architecture at MIT, active now in computer education for his country and in commodities.

—Stewart Brand

Disaster as Good News

by Rodrigo Arboleda Halaby

WE ARE in the midst of the southern hemisphere's winter, the middle of July. Newspapers keep a close watch on climate and weather news, especially that of Brazil. In London, nervous traders count the days and keep looking at statistics of past years and predictions from weather gurus as to the next few days' weather. The commodities analysts receive phone calls from all over the world inquiring about it.

In the Andean mountains, high over the most productive agricultural lands, many campesinos listen to their transistor radios, trying to read between the lines of the weather reports. They will not pack their mules to take their goods to the closest town or communal center unless they really know what the weather report says. They as well as the commodities traders in London and New York are inquiring about it.

All of a sudden a newspaper comes out with big bold letters on the first page, flashy news like: HELADA EN BRAZIL . . . ["Freeze in Brazil"]. The London trader jumps from his bed awakened by a phone call from Bogota or Rio de Janeiro or Sao Paulo. "Yes, it is true, it happened! Many hundreds of thousands of acres in the Brazilian state of Sao Paulo experienced a freeze for more than three hours at less than four degrees centigrade!" [39 degrees F.]. He then prepares for a busy day and perhaps for very hectic weeks ahead.

The campesino, after listening to the same news, decides not to take his mules loaded with coffee to town. He knows that prices will soar, and he is well aware of the speed of communications and the London commodities exchange and all that. He may be a campesino, but the transistor radio has given him instant access to worldwide news, and it matters in his business.

That day in his house, as well as in many other campesino houses, they dance, they drink, and they toast to the almighty God who will give them fortune and wealth in the weeks to come. The entire country of Colombia, and for sure the entirety of Brazil, changes gears, accommodates to the situation. Even with a freeze as severe as that, they start to count on the potential benefits in the coffee prices that could bring immense wealth to Colombia, and, most ironically, to Brazil.

A month later, people in Miami, New York, and San Francisco are watching the U.S. weather news with the same intensity. From the hurricane center in Miami: A hurricane has been detected in the southeast part of the Caribbean. It is heading west at 50 miles per hour, with winds of 100 miles per hour. If the present heading continues, it will hit the Central American countries of Costa Rica, Honduras, and Nicaragua in three days.

All trading in bananas stops. For three days nobody quotes a single price on banana loads, and the price starts to go up. Finance ministers and their advisers in every country of the banana-producing countries cancel their appointments and head to a special room in which close tabs are kept on the moody and unpredictable heading of this lady called Lisa or Sandy (lately also Paul, Jimmy, etc.).

Bananas and coffee. Two agricultural products that dictate the fate of millions of people in Latin America. Two products that represent the most important ingredient in the GNP of more than half of the Latin

American countries. Two products that depend on the misfortunes of other countries in order to reach profitable prices. Two products that *need* a catastrophe elsewhere to bring back into their countries sufficient dollars to keep the population active, to allow it to survive.

A few hours in July, and a few days in the northern hemisphere's summer months, and two products that are over-produced, that are always in over-supply, become for a brief time (months, maximum a year or two) the kings of the crops, the masters of their countries.

Is there another place or product in which climate suddenly becomes the controlling factor between abundance and scarcity? Between wealth and poverty? Between democracy and chaos? Between progress and stagnation? Between economic development or International Monetary Fund financial assistance? All within a few hours or days?

Must there always be products that require disasters like hurricanes or freezes so that vast amounts of the populace can survive and prosper? Hopefully our man in London, or the campesino in the Andean mountains, will one day give us NO as an answer! □

This Third World tale comes from the Persian Gulf. Carl Hodges is head of the Environmental Research Lab at the University of Arizona, famed for its work with salt-water-tolerant crops, aquaculture (especially shrimp), and other highly innovative projects including a showpiece at Disney's Epcot Center. From a lifetime of exotic travels and activities Carl regards this as his "all-time favorite international experience story." —Stewart Brand

Moon Rock in Abu Dhabi

by Carl Hodges

WHEN RICHARD NIXON was president, and before the oil embargo and Watergate, our prestige, internationally, was rising — particularly in the Arab world. (In fact the Arabs in general thought Watergate was much ado about nothing.) One of the things that Nixon did was send to his various ambassadors around the world a little "piece of the Moon," which was encapsulated in a crystal ball and mounted on a stand with a plaque saying that the president of the United States was proud to present this piece of the Moon to whomever.

In the case of Abu Dhabi, it was Sheik Ziad Ben Sultan Al-Nian, the ruler of Abu Dhabi and president of the United Arab Emirates. This presentation was to occur at a time that I was visiting in Abu Dhabi, so the American ambassador took me along as his "show" scientist.

In that incredible Bedouin culture, it's common for as many as 200 Bedouins to have dinner with Sheik Ziad at the palace every evening. They sit around the perimeter of the *madulas* (a large room); Sheik Ziad sits at the head and receives important guests. On this occasion I sat next to him on one side, the ambassador on the other, with a translator whispering in our ears. With great fanfare, the ambassador presented the Moon rock to his highness, who proceeded (as is the usual custom) to pass it around the room for all assembled to review. Frankness is a character of these exchanges. As the rock went around, various Bedouins made comments like, "This is a rather silly thing to give to the ruler." "What's the significance of this little rock?" Etc. The language was actually more colorful.

By the time the rock had made its way back around, the topic of conversation had changed to, "What value is there to science in general?" and questions started to be directed towards me as to why Abu Dhabi was spending millions of dollars on the Arid Lands Research Center that the University of Arizona was establishing.

Sheik Ziad listened to all this. Then when the rock had made its way back to him, he began to lecture the group. He explained that before the coming of the Western oil experts, everybody in Abu Dhabi rode on camels and times were extremely tough. These foreign scientists came and discovered this great wealth under the ground. It had always been there, and yet the Abu Dhabians themselves were not clever enough to develop it. Now, because of the oil, they were rich beyond their wildest dreams.

They should invest their riches in science and technology, he said, because any society that could make the decision to send a man to the Moon, and do so, could easily make the decision that they didn't need oil. And if the West were to make such a decision, the oil would be worthless, and they would all be riding camels again.

Later on the oil embargo hit, the price of oil skyrocketed, and the West capitulated. I found myself amazed that we in the United States did not believe that we could do without the Arab oil.

My favorite management article is a small paper written by Sterling Livingston of Harvard years ago called "Pygmalion in Management," where he showed that the number one factor determining the performance of people that work for an individual is the expectation of the supervisor as to the performance he'll receive.

If Sheik Ziad had been ruler of the U.S., instead of Carter, we would have risen to meet much greater expectations. ■

Local Citizen Lobbying

Persistence, Patience, Passion

by Peter Behr

YOU SHOULD BE AWARE that an issue that is urgent and of highest priority to you as a citizen lobbyist may represent a problem — or an opportunity — that the legislator you intend to influence knows little about. He* may have formed no opinion at all, nor taken a position. Don't be shocked or outraged about this, and don't presume he is stupid or insensitive because he is uninformed. It is easier to write your message on a clean blackboard than to have to erase his misconceptions or prejudices before you begin. Above all, in your letterwriting, your visits, your press releases, and your attitude, be courteous and patient.

If it's an emotional issue, as most of the real issues are, use your emotions as a vehicle to convey any personal experience that helps illustrate the human dimensions of the problem. Also, ask your legislator for advice on what to do. It is flattering to him to be asked for advice, as well as useful to you to hear him out. It's also pleasant, particularly for a legislator, to be allowed to talk, not so pleasant to be talked at.

Make your letters, visits, and news releases short and cover the high points only. Avoid the slang or buzzwords of your subject like the plague, or you will lose your amateur standing as a constituent, which is your most valuable asset in citizen lobbying.

You must know your subject matter and enough about the fiscal realities of the local government you approach to have a good idea of what is possible to accomplish. Fiscal restraints at every level may require you to scale down your project or have it divided into several packages or let it be accomplished over several fiscal years. (Legally, a city council, board of supervisors, or governing body of a special district cannot commit beyond the given fiscal year — but once a program has begun, it is much more likely to have its funding continued, even in hard times.)

We hear a lot about the power of "special interests" in the state capitals and Washington, and this power is all too real. It is growing and has become a cancer on the body politic. But at the county level the special interests do not have inordinate power, and you will discover that your major stumbling block is all the good causes that compete with each other for the scarce tax dollars available. To name just a few: low and moderate cost housing; proper care for the very young and the very old; combating juvenile delinquency, toxic wastes, drugs, and violent crimes; and public education, public transit, public health, and public unemployment.

The foregoing is meant to emphasize that it's the job of a citizen-lobbyist to inform, arouse interest, and bit by bit make your legislators "friends in court" for your project. The old saw that the squeaky wheel gets the grease may or may not be true, but if it includes persistence, as well as the right kind of noise, the problem will at least be recognized. Unfortunately, there is too little grease to go around these days, so you must be credible and very persuasive, as well as persistent.

A realistic definition of the word *persistence* is "patience with a purpose." With legislators these days you should combine your persistence with a little tea and sympathy, for it's a tough time for them, and they need both.

In the final analysis, everything that's done in the way of lobbying is cumulative. When the cumulative weight of lobbying and caring reaches a certain stage, the scale shifts, and sooner or later what was once impossible becomes improbable. What was improbable becomes probable. What's probable happens. And when it does happen, usually nobody's there to see it because it is routine, it is accepted, it becomes a yawning matter.

No cause is won by a single event nor by a single person. Like running for office, the citizen-lobbyist must develop a campaign and the services of other committed persons who share the same feeling of urgency on the proposal. So lobbying begins with recruiting and/or persuading an organization in your field of endeavor to take a lead role in

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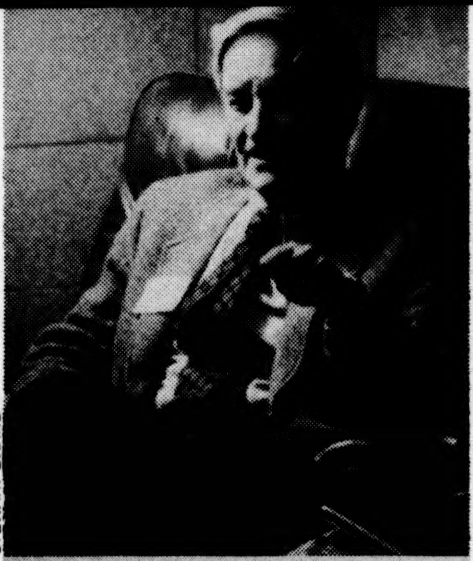
*For convenience please let "he" stand for officials of both sexes. Thank goodness there are more and more women coming into politics, especially at the local level.

This is the second in a series of talks on the technique of local politics by an old master. Retired (never defeated) California State Senator Behr served for years as a county supervisor and city council member. Unlike most retired state legislators he returned to his district (Marin County) after active duty rather than lingering on in the Capitol.

Behr's seminar series has been given twice as a sequence of Wednesday evenings, which was fine for the growing number of locals who wanted to attend, not so hot for distant admirers. So the next version of "Local Politics" will be a weekend seminar on National Park land near Sausalito, Saturday and Sunday, July 23-24. See Uncommon Courtesy schedule, p. 130-1 this issue, for details.

—Stewart Brand



STEWART BRAND

There're very few environmental lobbyists. There were only two full time when I was up in Sacramento. Now there's only one. The insurance industry had eight full-time lobbyists, and the banking industry had six. They all knew their business, and their business was to be your next best friend. These professionals never showed blood, even when the wolfpack was on them. It wasn't that they didn't care, but they recognized that they were searching for your votes on *their* way of thinking as often as they could get them. They realized you weren't always going to be on their side, so if you voted against them they didn't show resentment. They were always very helpful. They were always very kindly and very interested and very concerned about you. They also came to know your staff intimately, which was one part of their lobbying. But more important in all of this, the best of them — not the old-timers who depended completely on influence, but the new breed of lobbyists — knew their business, knew their facts, never misrepresented. Their coin was credibility. This didn't mean you needed to like them. It didn't mean that you needed to vote their way. But it did mean that when they told you something, if it was factual, you could be sure it was true, even though it may have been against their efforts and against the vote they were searching for. Of course, it helps to know enough to ask the right questions. Lobbyists rarely volunteer facts that are against their clients' interests, but they must answer your questions factually, or permanently risk being disregarded by legislators and in time discarded by their clients.

the lobbying effort. The commitment of the organization — in light of its other efforts — had better be assured. Otherwise, when you most need its help, you may find you have only a Resolution of Endorsement and little else.

Check your own motivation and style and expectations. If you are unwilling to share the responsibility and the leadership role with others, to make it "their"project as well as "yours". . . if you are set in concrete on the exact nature of the proposal or the campaign and unwilling to adjust to reasonable input from others . . . if you expect to carry the day in a month or even a year and will be surprised if you don't . . . may I suggest you don't start, for you will only be disappointed or, worse yet, embittered by the effort.

FOR MAXIMUM effectiveness, while you may not find this in the literature, I suggest as a beginning to write a letter requesting a visit with the legislator most likely to be receptive to your proposal. Explain briefly in your letter the nature of the proposal, offer alternative dates, let him know you are aware of how busy he is, and guarantee not to take up more than a half hour. When you get to his office, introduce the two or three others you should bring with you and identify the organizations and individuals pledged to lobby for the proposal. Seek his advice on how best to approach his colleagues, and how to modify the proposal to make it more attractive, if necessary.

This first visit should be a quick "in and out" affair. For goodness' sake, don't ask him to author an ordinance for you or try to find out whether you have his support. This overeagerness will offer him a golden opportunity to say no. If he's the very one to help you the most, he's probably overcommitted already and will likely tell you so, so don't let him.

Leave sooner than later, offer him a one- or two-page fact sheet to review, and be sure to send him a letter of thanks for the interview. That will be a rare experience for him in itself.

Some of the best "public interest" lobbyists manage to convey (without saying it) their certainty that the person they are lobbying believes in their causes as much as they do. This confidence seems to be very persuasive. Even doubtful prospects find it difficult not to live up to a better reputation than they probably deserve. They want to be wanted, and like to be liked, as do we all. However, if it is a calculated stratagem on the part of the lobbyist, it won't succeed. It must be a genuine part of the persuasive power of positive thinking, and then it sometimes works seeming miracles.

Don't challenge the legislator, don't threaten him. This is a curious fact that I think is a fact but is rarely mentioned. People in elective office enjoy the independence of it. When you think about it, it's one of the few offices that has any true independence left. You can't get rid of 'em for four years as a rule, or two years, and the likelihood of getting rid of them is difficult anyhow. Some of them think they're above the salt, there's no question about it. So if you challenge them, they're going to vote against you to prove their independence. They're going to enjoy exercising their power. And if you go to hearings, don't get cranky with any of them who are insulting you, because they all belong to the same club and you're not a member. They will rally around the browbeater and you'll find yourself at the low end of the totem pole. They may realize he's the biggest boob that ever held elective office, but he's their boob and they'll protect him against all non-members.

There is nothing wrong with inviting a legislator to lunch or even dinner. All too often her husband or his wife is not expressly invited at the same time, and that's a great mistake. Let the legislator know it will be primarily a social affair, and make sure it is.

Some of the most persuasive arguments a lobbyist can conjure up pale into insignificance compared to a face-to-face confrontation of the legislator with reality. This can only be achieved with a site visit to the area of the problem (or the opportunity). I have toured low-cost housing projects, the state hospital in Napa, workshops and kindergartens for the mentally retarded, sites for future parks, and branch libraries in Marin. I inspected Marin's old county jail and have been taken through San Quentin prison more than once. These tours, and many others, would never have taken place without being planned on purpose to educate me and persuade me to revise my priorities. They were memorable and effective, well worth the effort and persistence they involved to plan and carry off. Sometimes you can get two or even three council persons or supervisors to do this. With a bit of advanced planning the press enjoys participating, and good coverage can usually be assured, complete with photographs. Make it fun as well as informative, and you have advanced your cause immeasurably.

I remember a field trip I was induced to take in Napa County to inspect low-cost housing. It wound up in the home of a very poor Chicano family, which was all decorated for the occasion. They put out the food, and there were three or four charming Mexican girls who wanted their photograph taken with me. A dignified old gentleman sat at the end of a long table and didn't say anything, but everybody recognized he was someone important. At the end of the festivities he stood up and everybody was silent. He said, "I never thought I would live to have the honor of having a senator in my house." Well, you know, you never forget that.

One of the Great Letters

Now nobody expects to win the day with a letter. No one should. Letters are a means to an end, and they're cumulative. They do a lot of good, though, because everybody in politics knows, first of all, that when someone writes a letter, they represent a large number of persons who haven't made the effort to write one and yet feel just the same. As your constituency grows you have some feel for the number each letter represents. Of course if they are form letters you can forget about them. If they are printed postcards with the blanks filled out you can forget about those. If they are petitions you can forget about them unless the number of names are so many that you can't afford to disregard them.

Sometimes a succinct letter which has gone through a number of drafts can have an enormous impact. I have one of these letters here which I'll read to you. It's a unique example. I think you'll see why.

There was a bill called Senate Bill 535, which was introduced by Bill Campbell. Bill Campbell's a great big heavyset — one might say fat — rather carefree fellow, who's now the leader of the minority Republicans in the California state senate. Not a bad fellow. He was a very able legislator in terms of getting bills through.

What the bill was about was this: It said when an adopted child reaches the age of majority, then he or she may seek the cooperation of the state in locating his or her natural parents.

I got this letter, and the letter caused me to change my mind completely on the bill. I became a strong and urgent opponent of the bill. It was taken up on the floor. Campbell put his mike up, his bill was called, he described it, and I stood up. I said, "Ladies and gentlemen, I want to read a letter from my constituent before we vote on this bill." And I read it. And the bill went down to a thundering defeat on the Senate floor. I was the only person who spoke against it, and that was the only thing I did. —Peter Behr

The letter said:

Dear Mr. Behr,

It's come to my attention that legislation enabling adopted children and natural parents to reunite is in the legislature. I am strongly opposed to this bill. It denies the philosophy of adoption, which is a total commitment of parents to the child, the state, the county, and the anonymous natural parent.

That's very different from foster care, and that's what the bill will make adoption. Of course there are so few children available for adoption now that most families will take their chances with possible unwanted intrusions at some future date. But is that really fair to all concerned? There are legal methods of recovering original birth certificates when a real need exists right now. Hereditary illness and so forth.

And all the parties deserve this protection. The natural mother, who's made the terribly difficult decision to give up her child, should be allowed to live out her life free of the fear of confrontation with a stranger wanting a piece of her life. The adoptive family who understands that nobody ever owns a human being nevertheless needs to know that they are safe from a legal and emotional tug-of-war over a youngster who is truly theirs. The adolescent child needs the stability of one set of parents, without the imaginary fairy godmother who would be his appeals court when things get difficult, as they often do for adolescents.

The major reason for the passage of this bill appears to be curiosity and a little work for attorneys, and that really is a poor reason for placing thousands of families in doubt and turmoil. Our personal stake in this is that only one of our three children is adopted. We've never noticed any particular difference in the children, and they're all almost grown now. Had we known that anyone would foolishly change the laws, we might have attempted to conceal the child's origin. Many people will do so now. It's terribly hard to raise a child with a lie, but who can blame them if they do.

Yours truly,

Whatever local entity you are lobbying, it's well to have its specialists involved and hopefully on your side from the beginning. They are the ones whom elective officials seek facts and opinions from. They become part of the problem if overlooked, when you should have made them part of the solution from the very beginning.

It's worth mentioning that you should research local newspapers' libraries (formerly known as morgues) covering your legislator's last campaign and those of his successful colleagues (when they were elected or reelected). In this way you can resurrect where they all stood way back then on various issues, perhaps including yours. Also, political newspaper advertisements usually list voters who sponsored a candidate and the names of the key members of campaign committees. Along with contributors, who are filed with the county or city clerk's office, you will then have a list of those who helped put your legislators in office. If some of them favor your project, they are in a position to put in a good word on its behalf.

And of course the League of Women Voters, as I'm sure you all know, has observers at all the hearings of all the city councils and boards and the planning commissions and so forth. These observers become exceedingly knowledgeable, and are well worth consulting in terms of who's doing what to whom and how each person is likely to vote. It's a very good source of information.

Question: Peter, this has been a wonderful presentation of how to be an intelligent and effective lobbyist. I wonder if you could say something about being intelligent and effective as a recipient of lobbying — what the responsibilities of the office holder are toward lobbying efforts.

Behr: I think if you're in elective office, you have a duty to listen. You don't have a duty to agree, but you have a duty to listen, and to consider thoughtfully even points of view which you may not agree with or enjoy.

And I think you have another duty which is even more important, and that is, don't trend too soon. The one thing I always hated when I was in court was to come before a judge, who instantly seemed to think he knew *all* about the situation at the end of the third witness when there were thirteen more still to testify. From then on he wasn't even listening, because he had made up his mind. He was not only wrong as a rule, but for all the wrong reasons. If you get somebody who's like that in elective office, you've got a poor office holder.

Thirdly, I'm very concerned if you find (and this happens) that deals are cut in a council or on a board. The members kind of look over the agenda and they sound people out and while they don't make deals openly, they can talk in shorthand without moving their lips. What that does is to make a charade of public meetings, because they may appear to be listening to you, but whatever you say is stillborn because they've already agreed on how they're going to vote. They're not going to change their vote even if you convince them, because they've got to live with their colleagues.

Another thing that your office holder owes you is some diligence in terms of digging. He can't dig as deep as you'd want him to on every issue, because even in the smallest of our cities these issues are too complex and too compound and they come at him too fast, and he may have his own special interest, and he has a right to be tired some nights. But still overall he should be reasonably diligent.

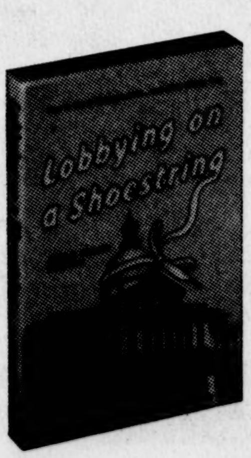
Then I think if a matter of principle comes up, that he should vote his conscience. That doesn't happen very often because most mattters that come up aren't matters of conscience. But there are some. Like the death penalty. Like the nuclear freeze. Like gun control. And others that you can name. And, damn it, he's got to stand up there and be counted. ■

Lobbying on a Shoestring

Nuts-and-bolts advice for lobbying your state legislature. This well-organized step-by-step run-through is especially geared to the Massachusetts legislature, but much of its advice is applicable to most any state government. Reproductions of typical documents and irreverant cartoons relieve the text and help make it a pleasure to read.

—Jay Kinney

Lobbying on a Shoestring
Judith C. Meredith
and Linda Myer
1982; 160 pp.
$7.95
postpaid from:
Massachusetts Poverty
Law Center
Two Park Square
Boston, MA 02116



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Nonpublic issues

About ninety percent of the bills in the legislature address **nonpublic issues**. These issues, though quite painful and important to those directly affected by them, are generally unknown to everyone else. Only the people suffering under the current law, their advocates, concerned legislators, the bill's sponsors, and administrators of state programs related to the problem will follow the progress of these bills.

Examples of nonpublic issue bills include those which clarify the rights of handicapped persons, establish environmental programs affecting only particular communities, or simplify procedures in government programs.

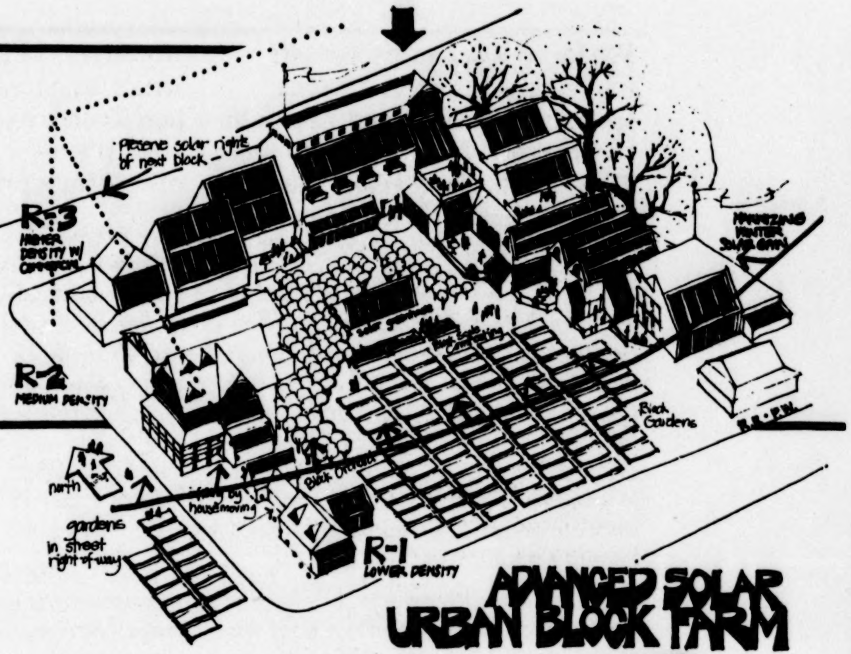
Don't assume that bigger is always better in the game of passing legislation. Working on big public issues appears glamorous, but these fights are often the hardest to win because the opposition mobilizes so forcefully against them. (The old law of Newtonian physic: To every action there is an equal and opposite reaction.) Often it's easier to succeed in lobbying for bills addressing nonpublic issues. If you keep quiet, these bills may arouse no opposition and will pass unnoticed.

The Edible City Resource Manual

The city, Britz and his colleagues feel, has hopelessly subjugated the countryside through the machinations of agribusiness; and now it is feeling the consequences — chemicalized foods, insanely inflated land prices, and a generally deranged and dubious-futured food supply. What's needed is to bring the country back into the city, so Britz, et al., are busy figuring out ingenious ways to make cities much more productive and self-reliant.

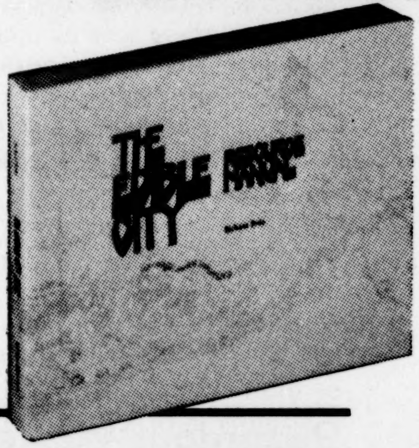
Their book is full of drawings, diagrams, and aerial photographs showing how food production can be shoehorned into urban neighborhoods; a particular virtue of their approach is a series of case studies of actual Eugene, Oregon, neighborhoods, where you get down to the house-by-house level of what can be done and how to make it happen with the real people really living there. There's a detailed sequential model showing how the typical land-wasting American city block can be transformed into shared, integrated, productive space. There are also wonderfully appealing lesson plans for "school farms," hints on raising rabbits (I particularly like a movable bottomless cage — a "rabbit lawn mower"), notes on seasons and species, and endless practical suggestions for city agriculture. **The Edible City Resource Manual** *joins Rosalind Creasy's wonderful* **Complete Book of Edible Landscaping** *($16.70 postpaid from Sierra Club Books, 530 Bush Street, San Francisco, CA 94108) as an aid and inspiration in making our cities more productive as well as more beautiful — something that landscape architects seem to be catching onto (at last!) in a big way.*

—Ernest Callenbach


Preserve solar rights of next block
R-3
HIGHER DENSITY W/ COMMERCIAL
MAXIMIZING WINTER SOLAR GAIN
R-2
MEDIUM DENSITY
solar greenhouse
Block Gardens
R.R.·P.W.
north
infill by housemoving
Block Orchard
gardens in street right of way
R-1
LOWER DENSITY
ADVANCED SOLAR URBAN BLOCK FARM

The Edible City Resource Manual
Richard Britz
1981; 354 pp.

$12.95
postpaid from:
William Kaufman, Inc.
One First Street
Los Altos, CA 94022
or Whole Earth Bookstore



IPM for Tomatoes

The Integrated Pest Management group is a small but alert aspect of the University of California that is finally responding to reality by issuing advice on plant problems that doesn't always conclude with a recommended dose of toxics. The IPM group, with assistance from others, has done books on pears (Winter '79 **CQ***), grapes, alfalfa, walnuts, and rice, and coming up soon will be citrus, cotton, cole crops, and lettuce. The books are as impressive in their scope as they are handsome in their layout, and their remedies range from pheromone traps and Bacillus thuringiensis to soil fumigants and herbicides. This reflects the very real difficulty of recommending practices that aren't immediately cost effective to a farm community so squeezed financially that there's no room for deviation or experimentation, even though the long term benefits may be obvious.*

This is the definitive book on tomato ailments, and although it's aimed a large-scale operations, it's just as useful for gardeners, especially those classified as Tomato Extremists, like me. I've yet to decide whether the attraction is based on nutrition, looks, or some unobtainable sensual value, but there's definitely a connection and it's fed by desire for the Perfect Tomato Plant. It follows that when disaster strikes there's a scramble for assistance, and since the general purpose garden books often fail in critical situations, you can imagine my appreciation for 104 pages loaded with color photos and scientific progress, all of it dedicated to no other proposition than diagnosis and remedy. For the committed grower this book will become a standard reference.

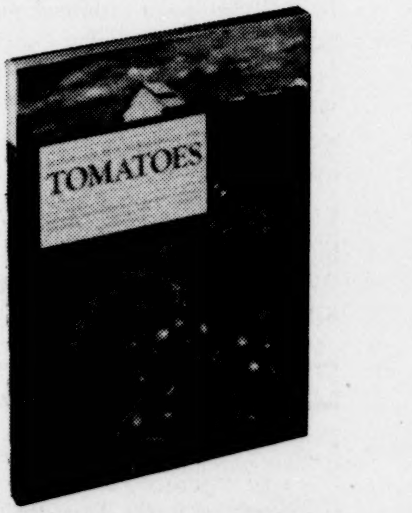
—Dick Fugett

Integrated Pest Management for Tomatoes
UC Integrated Pest Management Project
1982; 105 pp.

$14.40 postpaid
(Ask for publication 3274; make check to UC Regents)

UC Extension Publications
Catalog

free
both from:
Agricultural Sciences Publications
University of California
1422 Harbour Way So.
Richmond, CA 94804

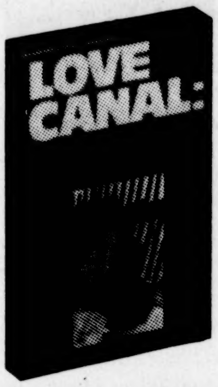


Mines of the vegetable leafminer begin as threadlike white lines; they widen gradually as the larva feeds. This leaf has two mines (left). This mine has been opened to show the legless, yellowish leafminer maggot. The dark line in the mine at left is the trail of feces left by the maggot (right).

Love Canal

Love Canal
(My Story)
Lois Marie Gibbs and
Murray Levine
1982; 192 pp.

$4.95
postpaid from:
Grove Press
Order Department
196 W. Houston Street
New York, NY 10014



Lois Gibbs describes herself — "before Love Canal" — as a typical "dumb housewife," preoccupied with raising her children, keeping a tidy house, and pursuing her hobbies. In December 1977, three months after her son started kindergarten, he developed epilepsy and a lowered white blood count. Soon afterward, she read in the local paper that her son's school had been built on an abandoned chemical dump, where Hooker Chemical and Plastics Corporation had dumped over 43 million pounds of toxic industrial wastes before selling the site to the school board for one dollar. Mrs. Gibbs' battle to transfer her son to another school grew into all-out war against local, state, and federal governments, resulting in national publicity and — finally — a federal order to relocate some one thousand families whose homes had become deathtraps.

The Love Canal residents' battle alerted the nation to the hazards of thousands of toxic time bombs hidden across the country by negligent, unscrupulous industries. Lois Gibbs' story — of collusion, coverups, bureaucratic corruption and inertia — is an enlightening portrait of the inhuman machine that masquerades as "democracy" in technological America. It is also an encouraging message that "you can fight city hall."

—Carol Van Strum

•

We went over to the Schroeders' through the backyard. Bill Wilcox could see the gunk there. Then we cut across the canal to get to Debbie's house. Debbie and I made him a little paranoid, I think, because we told him to watch where he stepped. "Barrels are erupting. There are holes all over the place. Be careful you don't step in any goop." We showed him some of the holes. He got a sinus headache from the walk across the canal. He said he felt it immediately. As we went across the canal, we found one of those black holes that is so deep that you can't get a stick to the bottom of it. You pull the stick out and see black gunk its entire length.

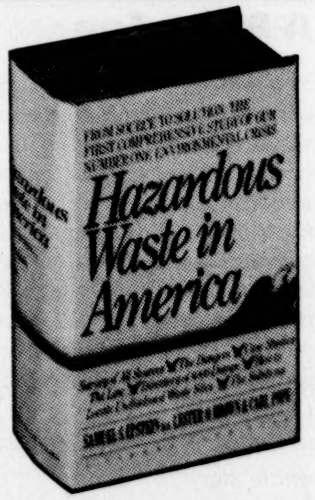
We showed him the barrel that was coming to the surface right near Debbie Cerrillo's swimming pool and the hole with black gunk in her yard. Pete Bulka lived next door to Debbie. Pete had been complaining to the City of Niagara Falls for a long time, but nothing was ever done. Pete explained how his sump pump had to be replaced every few months because it corroded. The county health commissioner wanted to cap everyone's sump pump because they were pumping chemicals from the canal into the storm sewers and then into the Niagara River. He acted as if it were the citizens' fault that they were pumping poison into the river, that it was better that it just stayed in people's basements.

Hazardous Waste in America

Hazardous Waste in America
Samuel S. Epstein,
Lester O. Brown,
Carl Pope
1982; 559 pp.

$29.25
postpaid from:
Sierra Club Books
530 Bush Street
San Francisco, CA
94108

or Whole Earth
Bookstore



Love Canal is not "somewhere else" — the same poisons found in Hooker's dump have been found in the blood, urine, semen, and milk of humans nationwide. Ignorance is no protection against them.

***Hazardous Waste in America** is a compendium of information about the particular components of the 80 billion pounds of hazardous waste materials generated annually by American industries — 350 pounds per year for each inhabitant of the U.S. The book includes a directory of 8000 toxic dumps located in all 50 states; a field guide to locating undisclosed waste sites; a selection of case studies of toxic dumps and their tragic human toll; an excellent "citizen's legal guide to hazardous wastes"; and an intelligent, emphatic discussion of the political, legal, practical, and philosophical solutions to a toxic nightmare that is all too real.*

If $30 seems a stiff price for the book, compare it to the cost of your 350 pounds of deadly muck for this year. We are all responsible for the behavior of our society, which includes cleaning up — and preventing — the garbage produced in the interests of comfort, convenience, and profit.

—Carol Van Strum

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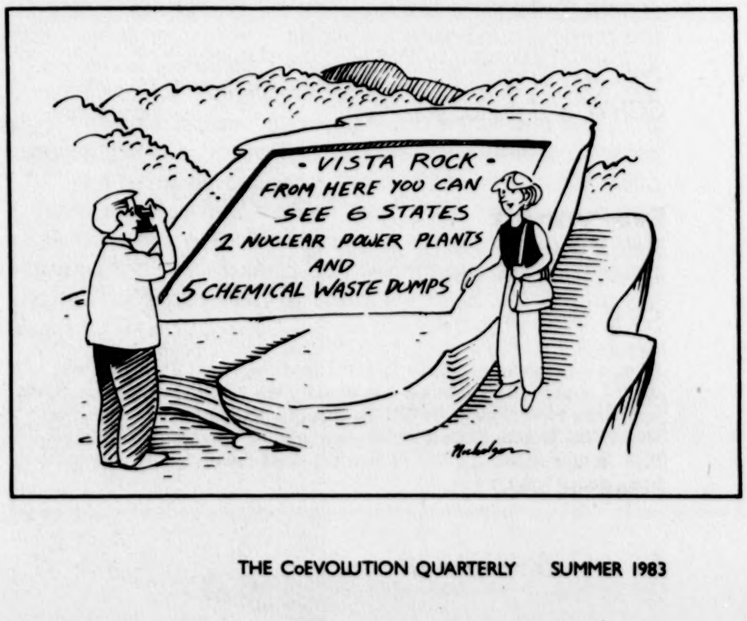
The American Petroleum Institute (API) estimates that there are hundreds of thousands of underground gasoline storage tanks throughout the nation. Most were installed in the 1950s and 1960s, a time when the retail gasoline industry was expanding rapidly. The great majority of storage tanks were constructed of steel. These tanks and their pipe connections, designed to last, at most, twenty years, are subject to corrosion, and hundreds of leaks have been reported recently.

Once gasoline has leached into groundwater, it is extremely difficult, if not impossible, to completely remove. Gasoline contamination of an aquifer may render it unusable for decades.

Everyone's Backyard

Lois Marie Gibbs has founded the Citizens Clearinghouse for Hazardous Wastes to provide assistance to



Fire in America

This book concerns fire, ecology, and mankind, and the history they have made together in North America. Nobody has ever written on the totality of this subject before, and while this dense volume may easily qualify as more than you ever wanted to know about fire regimes, fire-fighting techniques, and the history and politics of the U.S. Forest Service, it is a fascinating story and well told. And if anybody gives out awards for the best dust jacket photo, this book gets my vote.

—Richard Nilsen

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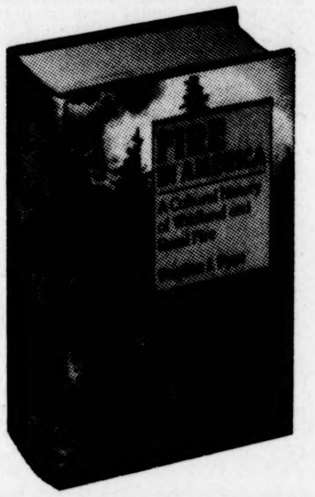
Zealous attempts to eliminate the effects of all floods, including minor ones, has unwittingly encouraged conditions in which even moderate floods (as judged by volume of water) have exhibited effects associated with major floods. Apparently over-developed engineering structures intended to confine the river too closely have deprived the river regime of the flexibility it needs for self-regulating mechanisms to work. Likewise, the refusal to tolerate small, low-intensity fires makes otherwise moderate fires likely to behave more erratically by increasing the amount and rate of energy released. But here fire and flood differ. Once rain ceases, the flood crest is determined by the characteristics of its channel. But a fire, however small, may make that critical transition to a large fire. Flood control devices must be in place prior to the flood; fire control, only soon enough to stop a fire before it has the opportunity to grow. Flood waters dissipate, flames propagate.

Redding Hot Shots, Wenatchee fires, 1979. The concept of the rapid deployment force applied to firefighting by the U.S. Forest Service.

Fire in America
Stephen J. Pyne
1982; 665 pp.
$35
postpaid from:
Princeton University Press
41 William Street
Princeton, NJ 08544



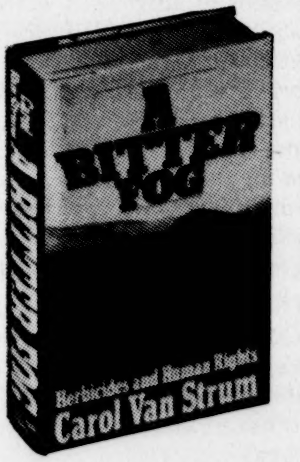
A Bitter Fog

In this book **CQ** *learning editor Carol Van Strum presents a different kind of learning than the kids' stuff she often covers in our magazine. At issue is phenoxy herbicide spraying on conifer forests in western Oregon. The learning is done by the peole who live in those forests, Carol and her family among them. From their own bodies they learn that the sprays are deadly, and from each other that they can organize, educate, sue the government, and win. And finally they learn that one battle is not the whole war.*

By letting the participants speak for themselves, this book communicates what is often technical information in a tone that is direct, earthy, and accessible. This whole story happened once before, in the 1960s in the Pinal Mountains of Arizona, and it was a woman who told that story as well. Billee Shoecraft wrote **Sue the Bastards!** *and later died — not surprisingly — of cancer. I wonder how many more books like these will have to be published before phenoxy herbicides get put up on the shelf with the other technological fixes that only helped mankind by killing the Earth.*

—Richard Nilsen

A Bitter Fog
(Herbicides and Human Rights)
Carol Van Strum
1983; 320 pp.
$16.70
postpaid from:
Sierra Club Books
530 Bush Street
San Francisco, CA
94108
or Whole Earth Bookstore



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Every person in the room had a tale to tell. Beekeepers had lost their bees after the spraying. A rancher had lost 23 out of 36 young heifers after the road through their pasture was sprayed. (We learned later that it was our pasture those heifers died on; it had been leased to the farmer the year before we moved there.) One woman had had fourteen miscarriages in the years she had lived in the valley. Another told of her two miscarriages, and of her son born with defective lungs and liver. The young wife of a logger had been unable to complete a pregnancy in the five years they had been married. An elderly couple told how their health suffered so badly every year during the spraying that they moved out of the valley for those weeks; they had always thought that they alone suffered such a problem.

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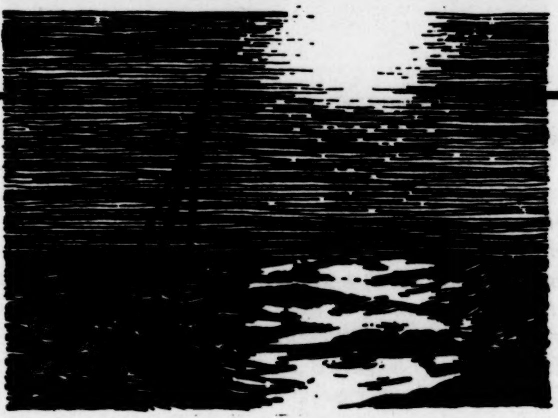
grassroots struggles in other communities. In the words of one volunteer staffer: "CCHW doesn't lobby; it doesn't simply provide information. It directly helps people organize, with the insight of people who have done it (before)."

Memberships/subscriptions to its quarterly newsletter are $15. Best to send for some information first, to see if CCHW is right for you. *—Jay Kinney*

Everyone's Backyard
Patricia Logan, Editor
$15 /year (4 issues; includes CCHW membership) from:
Citizens Clearinghouse for Hazardous Wastes
P.O. Box 7097
Arlington, VA 22207

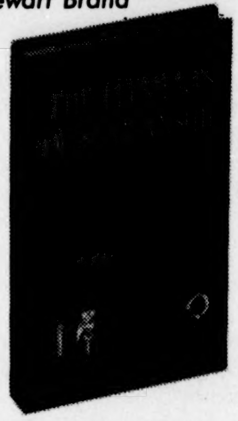
Everyone's Backyard



The Elements of Seamanship

*Like Strunk & White's **Elements of Style** this is a classic LITTLE book of true basics, in this case the basics of small sailboat finesse. Its section titles are exemplary: "I — Keeping the Water Out; II — Keeping from Hitting Anything; III — Keeping Her Going; IV — Keeping Her Where You Want Her; V — Keeping Your Reputation." Taylor is a natural sailor and natural teacher, publisher of books by International Marine, the author of those fine boat profiles in **National Fisherman**, and a kind man of the old New England school. The book originally appeared as a series in **WoodenBoat** magazine.*

— Stewart Brand



The Elements of Seamanship
Roger C. Taylor
1982; 121 pp.

$14.95
postpaid from:
International Marine
Publishing Company
21 Elm Street
Camden, ME 04843
or Whole Earth
Bookstore

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Read the Rules of the Road. Comply.

When trying to keep from hitting another vessel while maneuvering under the Rules of the Road, make big, obvious course changes, not little, imperceptible ones.

•

When trying to work to windward in a light air with a leftover sea, ease sheets, fill her well away, get her going, and then bring her gradually back up close-hauled. If you don't try to head too high, it's amazing how well you can keep her going in such frustrating conditions using this tactic. When running off in such conditions, keep her up enough to fill her headsails.

To get the most out of a following sea, shoot diagonally across it, like a surfer.

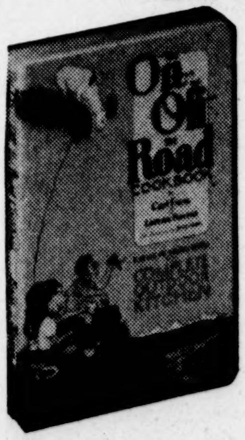
•

Keep your reputation by dealing well with emergencies. Be alert to an accident happening and be quick as a cat to react to prevent it or recover from it. In a boat, one accident can lead to another very quickly, so break the chain as early as possible. Yet don't be afraid to do nothing in a difficult situation until you have figured out what is really best to do. For instance, if your mast should come crashing down on deck, instantly yell and shove and jump to try to prevent injury, but then calm right down. After all, no water is coming in, and you haven't hit anything. It's merely a question of setting priorities and working through the mess step by step. When Pop lost his mast once, as soon as the excitement was over, the first thing he did was go below and make some coffee.

The On and Off the Road Cookbook

*A **realistic**, humorous, finely detailed book about low-cost cooking and eating away from home — on the road, off the land, out of a backpack, and while kayak camping. Innovative/funky solutions to trip provisioning and packaging, assembling functional "camp kitchens" from yard-sale miscellany for specific expeditions, adapting foods and cooking styles to camp-out circumstance, lotsa on-the-move recipes, scads of neat tips (cooking with sea water, tin-can stoves and lanterns, drip coolers, open-fire cooking, etc.). We're heading for Mexico next Monday — this book will be among our pared-down camp gear.*

—Lewis Watson



The On and Off the Road Cookbook
Carl Franz and
Lorena Havens
1982; 269 pp.

$10
postpaid from:
John Muir Publications
P.O. Box 613
Santa Fe, NM 87501
or Whole Earth
Bookstore

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Energy Drinks

Aside from the obvious psychological benefits of a good hot beverage, many of the drinks described here are low-cost sources of food and energy. They are based on *atole*, a kind of watery gruel that has been used for thousands of years in Latin America. The word 'gruel,' however, sounds like something you'd spill on your shoes so I'll call them Energy Drinks. These drinks can be used as snacks, nutritional complements or even quick meals. I'll give basic recipes but don't stop there; you can add everything from raw eggs to brewer's yeast to these beverages.

Just about any cereal that requires cooking can be made into an Energy Drink. Cream of Wheat is especially good and cooks very quickly. I've used 7-grain cereal mixes too, but they tend to be scratchy when chug-a-lugged.

•

Oatmeal Energy Drink

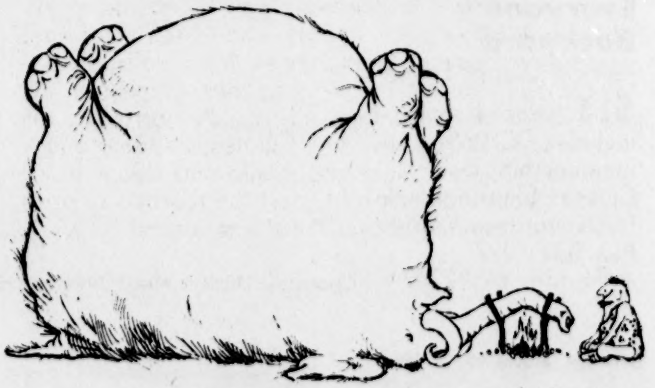
This is our favorite of the Energy Drinks and about the easiest to prepare.

½-1½ cup oatmeal
1 qt milk
1 tsp cinnamon

honey to taste
Additions
dried or fresh fruit

The more oatmeal you use, the thicker and heartier the drink. We prefer regular rather than instant oatmeal. Instant oatmeal tends to dissolve but some people prefer a beverage that doesn't require occasional chewing.

Heat the milk to the boiling point and add the oatmeal, sweetener, the cinnamon and whatever fruit or flavorings you like. Cook stirring constantly, for 15 minutes, diluting as necessary. A blob of butter looks and tastes good on top of a mug of Energy Drink.

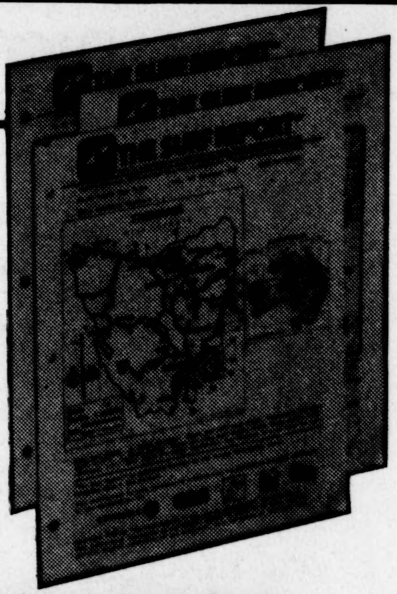


The Surf Report

Once saw a car topped with surfboards chug up and over a mountain road into the Himalayan valley of Kathamandu. They hadn't been reading **The Surf Report***! Each month 50 surfers stationed around the wet edges of the globe check in with the low downs and high ups of surfing in that area. If you could surf in the Himals it would be covered. One new spot (Portugal, Peru, Papau New Guinea), is presented in depth in each issue accompanied by maps displaying known hot-spots (no crowds) and admirably accurate advice on hanging out there, so you spend as little time out of the water as possible. A professor of meteorology winds up each issue with a global sea-weather report, forecasting storms, water temperatures, and wave heights. Other species of beach bums, and sailors, might take note.*

—Kevin Kelly
[Suggested by John Benecki]

The Surf Report
$30/year (12 issues)
from:
The Surf Report
P.O. Box 1028
Dana Point, CA 92629



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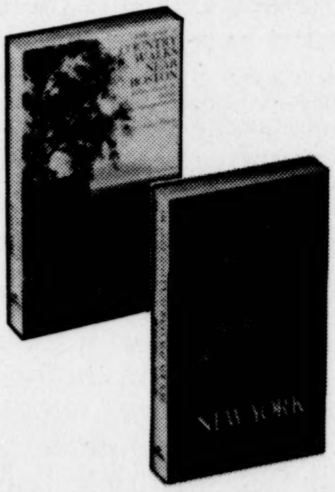
Morrocco: Rabat. Mean wave height 10', largest waves 26', water 50°. We really had big swells reaching 36' that gave us really bad surf conditions, mostly from N-NW. Generally very bad weather conditions. People were afraid of the lack of rain, now they are afraid of inundations! Very cold mornings and evenings. Strong wind to 65 knots from Dec. 25 to Jan. 5 (offshore of course!). The rocks at Smugglers Point have been covered by sand. Now we have a second spot due to the sandbar. January 8 was a memorable day, surfed Smuggler Point, 6-8' glassy tubes, sunny and hot.

—Zemmouri Hamid.

AMC Country Walks series

Within an hour's ride of every large city are enough pleasant walks to fill a book. Once along the water, twice 'round some gardens, and then through a historic battlefield. The walks included in this fine series are all reachable by metropolitan public transportation (applause!). I thoroughly checked one course listed in **Country Walks near New York** *that begins less than a mile from the house I grew up in. I've done that walk many times (it's a tough uphill one) and was surprised at how true the directions were. Lets hope this series, and notion, grows west.* *—Kevin Kelly*

AMC Country Walks series
Five volumes: Baltimore, Boston, Connecticut, Montreal, New York
$7.95 each
postpaid from:
Appalachian Mountain Club
5 Joy Street
Boston, MA 02108



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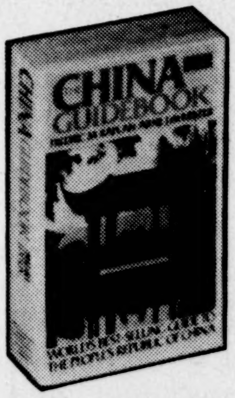
The lands which are to comprise DeKorte Park — as well as other portions of the Meadows — are currently accessible to walkers via several points of entry. Anyone new to the Meadows should be advised that not everything to be seen there, even in the future parkland, is "pretty" in the sense that we come to expect of nature on our weekend rambles. Parts of it look like a swamp wilderness: parts look like a dump. It is nonetheless a fascinating place, especially at this stage in its history. Perhaps it is sad to see what had until recently been a reedy, creek-threaded no-man's-land finally charted and planned into submission. But the future of the Meadows was rapidly narrowing into two options: wild, filthy, and polluted; or tame and reasonably clean. What about wild and clean? It couldn't happen. Look east, past the railroad bridges. There are counting-houses there a thousand feet tall.

—Country Walks Near New York

China Guidebook

The long-awaited news from China is that you can now wander there on your own. Visas that were formerly granted only to groups are now routinely given to individuals. The exotic hinterlands of Tibet and Xizang are accessible too, if you want to pay the ticket at $200 per **day***. (Well, toilet paper gets expensive when two of the ten trucks hauling supplies from Beijing carry nothing but fuel for the other eight.) Otherwise the extremely hardy can roam around for as little as $300 per month. At the moment informed travel to China is a mere sprout — if you get into the thick of anywhere you're doing pioneer vagabonding. This is the choice of the recent crop of hands-on guides aimed at helping non-group travelers, businessmen, or scholars bent on independent investigations of China. This is the only guide so far to list el cheapo hotels there.* *—Kevin Kelly*

The China Guidebook
Frederick Kaplan and Arne J. de Keijzer
1982; 528 pp.
$13.95
postpaid from:
Houghton Mifflin Company
Wayside Road
Burlington, MA 01803
or Whole Earth Bookstore



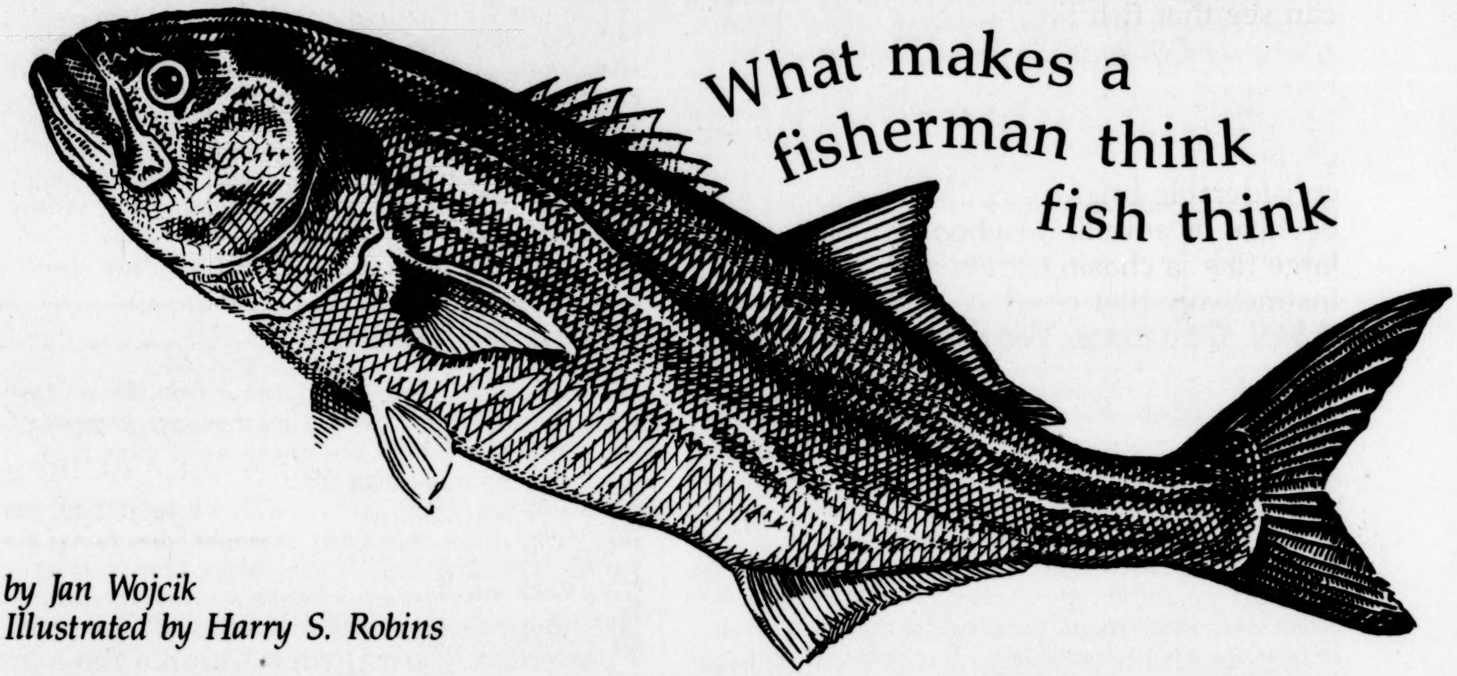
青島啤酒
TSINGTAO BEER

•

Qingdao Brewery. Perhaps one of the few positive legacies of Western colonialism in China is Qingdao's brewery, established by the Germans at the turn of the century. Some of the old wooden machinery is still in use, although it is being supplanted by glistening new bottling machines recently imported from the Federal Republic of Germany. Instead of the usual "briefing with tea," visitors to the brewery will get a "briefing with beer," served ice-cold in the traditional green bottles.

Although there are favorite brands in China (Wuxing in Beijing, Baiyun in Guangzhou, and the somewhat watery Shanghai brand), Qingdao beer is the most popular for export (it is sold under the old name, Tsingtao, in the US). Its fine flavor is attributable to the water from Mt. Lao (Laoshan), which also produces the best-known mineral water in China.

the eye of a bluefish



What makes a fisherman think fish think

by Jan Wojcik
Illustrated by Harry S. Robins

THE LARGE MERCURY LAMP fizzing over my head casts a liquid wavery line across the ripples of a large three-acre deep-water cove which looks across to the Connecticut shore. I'm thinking about catching a weakfish. They've been coming into the ferry dock cove on Fisher's Island pretty regularly over the past week.

The weakfish strategies of late have been to drive great schools of 10- to 12-inch-long tinker mackerel, which they find swirling in the waters of Long Island Sound, through the narrow channel and into the cove, to corner them against the banks and solid platform of heavy posts upon which I'm standing, and in the intense chaos of the swarms of frantic mackerel, to take their fill in arching attacks that never come any closer to the surface than two or three feet. When the mackerel are in and the weakfish are below them, the mackerel leap frantically out of the way above the surface with the sound of sudden squalls of rain. The tails of 100 of them at a time together reach back for purchase.

To catch a weakfish you start with a small pole and a tiny hook baited with a piece of clam or cut mackerel about the size of a thumbtack, and dropping this bait down into the swam just under the surface, you hook a mackerel. Then you take the fresh mackerel off the tiny hook, set the small pole down, take up a large pole rigged with a 2/0 hook, run the hook through the back of the living bait, and just as a mackerel school leaps in panic, you toss the crippled fish into the drink, hoping that the charging weakfish you're after will think your sinking mackerel's easy pickings.

Think is a fisherman's word, of course, not a scientist's. A fish doesn't have much of a brain, only a smallish swelling, weighing no more than a gram or two, at the end of its spinal cord, corresponding more or less to the brainstem and the midbrain that mammals inherited from fish. Our ancestor reptiles added a limbic region on top of that, to govern the control of the limbs

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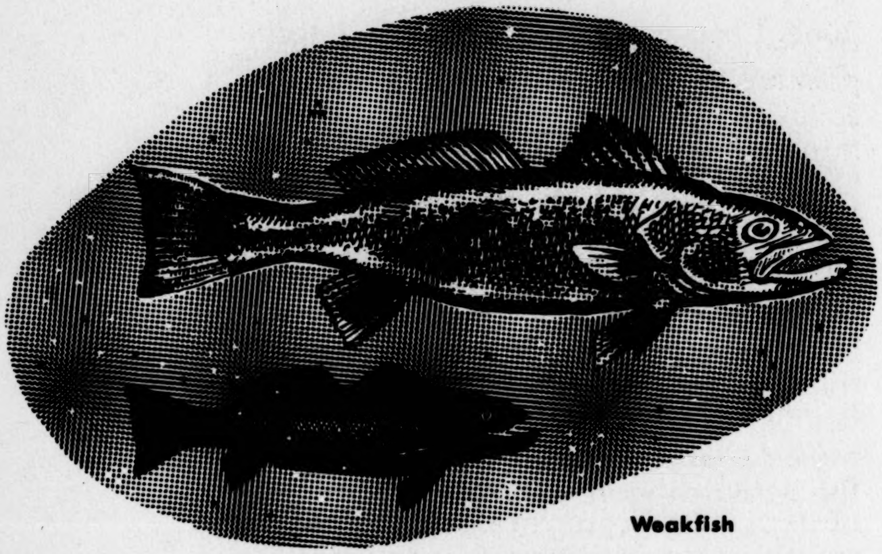
This finely-told fish story comes from Jan Wojcik who last appeared in the Summer, 1981 CQ with his account of bringing Wendell Berry to Purdue University for a speech. The detailed illustrations are by Harry Robins, creator of the erudite "Prof. Brainard" comic strips which pop-up periodically in ***Weirdo*** *magazine.* —*Jay Kinney* basically, and humans have added an enormous neocortex on top of that, to fill with recollections, thoughts, dreams, and anticipations of the future, some bright and some dark, as when we can anticipate mistakes, and even to our sorrow, our own demise. Fish, from what we see of them, are spared self-criticism and moral scruples. Everything they do is right. Their eyes don't blink as they prey or are preyed upon; some, we know, even eat their young. But anyone who looks long enough can see that fish have designs which give an aura of thought to what they do, especially in schools, with each thin brainstem a glowing stick held out to touch at the center of a consciousness of considerable brightness, like that of a beehive or anthill: A school of bait which a large fish is chasing splits apart, knowing instinctively that one-half of them can then escape. The bigger fish instinctively changes direction as if it can calculate the most fruitful vector. Teams of predators swirl around their prey, packing them into a dense mass that disrupts their thinking en masse. Fish play with bait or plugs when they're not hungry, swatting with their snouts and tails. They look as lazy and content hanging under the surface sometimes as any pride of cats lounging in the sun. But finally, I'll admit, what makes a fisherman think fish think is that he starts thinking like fish after awhile, partly because he wants to catch fish, partly because whatever the fisherman sees of the designs of fish, it's never enough to satisfy his curiosity. It's natural to imagine that whatever moves with a flash of its silver sides, and disappears faster than we can exclaim "there it is," can think.

This summer's night, so far, there are no mackerel and no weakfish in sight. For a while I stand staring at the channel between the cove and the Sound, waiting for the waters surging in with the tide to ripple. Then I look down. In the light glow I see a small school of butterfish, saltwater fish about the size and shape of a large sunny or bluegill, hanging almost motionless about two feet under the surface. Idly, I drop my clam-baited hook down. Four or five gather around just to look for a while. One by one they start teasing the bait off, so softly, as if they were caressing it. I try to set the hook gently, then sharply, when one first comes over, then after one's been nibbling for a minute, but the hook comes up loose, the bait falling off. A butterfish nips the sinking bait finally with authority and it's gone. I bait up, drop it down, and again they gather around.

In the next instant a huge mass of mackerel wells up from under the butterfish, breaks the surface, and I see the flash of weakfish below them. I am as startled as if somebody had just shouted right next to my ear. But I am so fascinated by what the butterfish do that I don't take my eyes off them. Surprisingly, they don't scatter and flee like the mackerel, although surely they must see and sense the terrible silver arc of the weakfish more directly than I; they're in the same medium. They must know that weakfish don't eat them, perhaps because their spiny dorsal fins would be too dangerous to snap down on in the direct, indiscriminate way that the weakfish takes its prey. So they're unperturbed, but not unaffected. The excitement gets to them. As the mackerel dash by, a butterfish, exhilarated for a moment by the chase, forgets caution and snaps at the bait on my hook with emphasis; with a jerk I hook one. To catch a butterfish, I learn, you wait until the slaughter of the sea turns them on.

FISH, in schools, have designs which give an aura of thought to what they do.

I have my butterfish in my pail, and for the moment nothing else. The mackerel school is gone and so is the weakfish. Once again I'm staring at a small school of butterfish hanging under the surface, waving their tails with a feathery grace. Then, as I stare, I see them stiffen and sink slowly out of sight, and I see a school of some dozen squid take their place. Surely the squid must have risen up from below, but it seems to me that they simply materialize as in a magician's trick. There are perhaps two dozen squid awaiting as I am, I guess, the next frantic herding of the mackerel. They face precisely the same direction just under the surface, with great, cold, luminescent eyes staring straight out to the side missing nothing. In the next instant three forces clash at once. The mackerel again surge up, the squid disappear as they charge into the school head on, and again a weakfish arcs up from below. My lightweight pole jiggles and bows. Only when I feel it do I look down and see I've hooked a mackerel (the only fish in view in the inky black water at the moment). Somehow that mackerel had the presence of mind in all that chaos to snap at my bait. Maybe that's not surprising, I think, as I crank it up



Weakfish

wiggling into my hand. Maybe mackerel are always feeding on the run. *That's* why they're so easy to catch.

I put down my light pole, take up the heavy one with the large hook and sinker, work on the mackerel, and wait for the next charge. The squid reform their ranks; the mackerel explore; I toss in my crippled mackerel; I feel a tug, set the hook, but don't feel any extra resistance. I think I've snagged a large mass of seaweed as I reel it in swishing over the surface. I derrick the mass onto the dock; a squid hangs off the mackerel that is still alive, terrified almost straight as a spoke, but unbitten as yet, tightening its grip on the mackerel's tail with all ten tentacles glistening, waiting still for the mackerel to give up. I pry the tentacles off, put the squid in the pail with the butterfish, which is soon smeared with ink, and spend two more hours fruitlessly casting for weakfish having their uninterrupted fill of mackerel. I know all about how to hook a weakfish, but I've never yet had one on the line.

BOTTOM fishing, one goes after stripers and blues as they feed in a different, more meditative mood at night, usually alone or in small numbers, and it's this pattern which most often fits my own mood.

Walking home under the moon with the butterfish, squid, and a few mackerel in my pail, I decide to go after bluefish or striped bass the next night; they're easier to catch than weakfish, and squid, I've been told, is especially good bait. We need fish; our freezer is almost bare. But even so I can choose whether to surfcast or bottom fish. The surfcaster goes after the gamefish as they feed with designs like weakfish, herding schools of mackerel or menhaden ahead of them in toward the shore, picking them off in the confusion of the surf breaking on large granite boulders. The waters of the Race between Fisher's Island and Orient Point are famous for these fish feeding in this way. The enormous volume of tidal seawater flowing in and out of Long Island Sound through this relatively narrow mouth creates turbulence which so confuses and concentrates the bait fish that large predator fish have made these waters a feeding trough before their great migratory runs for centuries. Big fish feeding in the late summer and early fall bring a carnival atmosphere to the island's Race Rock Point. All along the boulder-strewn shore fishermen stand at intervals that put them just out of reach of the next one's sidearm cast, and plug away mechanically, shouting, laughing, cursing, and crossing lines as the schools hit. Small boats ply just off shore, their fishermen's casts sometimes overlapping the shore casts. Bigger boats further off shore, some of them with parties of 70 and 80 people aboard, troll back and forth, or drift, with hundreds of lines shooting off the sides and catching in the surveying beacon of the Race Rock Light like a Fourth of July sparkler.

Bottom fishing, one goes after stripers and blues as they feed in a different, more meditative mood at night, usually alone or in small numbers, and it's this pattern which most often fits my own mood. They come in along the bottom to find pieces of food or swimming bait getting flushed out of the shallows, patrolling along the beaches just beyond the surf on an out-going tide. The best time to find them doing this is from the third hour of the out-going tide to the fifth hour, when the current is at its fullest strength. If you can get out there on a night when the third to fifth hours coincide with dusk turning to dark, say from nine to eleven in the summer, you're really in luck. The big fish, it seems, can see enough of what they're doing in this light to be fairly effective at feeding, but think themselves sufficiently shrouded by the twilight to feel even bolder in getting closer to shore, where they're more likely to come upon unwary crabs and milling bait fish not under general attack. The coincidence of time and tide is rare; in the course of the summer it'll only happen once or twice a month, and on several of those occasions it might be raining. This night was perfect. The full moon started rising at nine.

For bottom fishing on the beach I bring a blanket, a bucket with bait, a knife, insect repellent, a flashlight, a bag of extra sinkers and heavy hooks and 18-inch wire leaders, some matches, and two candle stubs. I fix up a place in the cup of the curve of Isabella Beach which extends about a half mile to the right and left. The beach lies on Fisher's Island's south side, facing out toward Block Island and Montauk Point, whose beacon light winks back. I turn a board sideways as a windbreak, prop it up with some stones, stick a candle in the sand, and light it for a touch of home. I dig a hole in the sand with my hands about a foot deep, and surround it with fist-size stones.

I run a number 2/0 hook through the squid several times. The hook snaps on the leader; the leader snaps on a two-ounce lead sinker shaped like a bullet that has two short lengths of bead chain on each end. On one end of the chain there's a snap for the leader ring; on the other, a ring to tie the line on. With the bait hanging about two feet off the tip of the rod, I stand barefoot, in shorts, at the edge of the surf, waiting for a wave to recede. Then, running into the water, I reach back and cast the sinker and bait out as far to sea as skill and momentum would have it. Even while the line is still whipping out of the open bail, I back peddle as fast as I can away from the next incoming wave. Then, on the dry beach, wallking backwards, I let out line until I reach the hole I'd dug. Into the hole I set the butt of the pole, and pile stones around to keep the rod upright and stiff. I close the bail, and turn the crank until the rod tip just bends over slightly, pointing out to where the sinker and bait hold the line in sensitive, guitar-string tension. Then I sit and wait, and think pleasant thoughts about fishing — one ability we do have over and above the thinking of fishes — thoughts we can take back with us to warm cold November nights, when, as Wordsworth said:

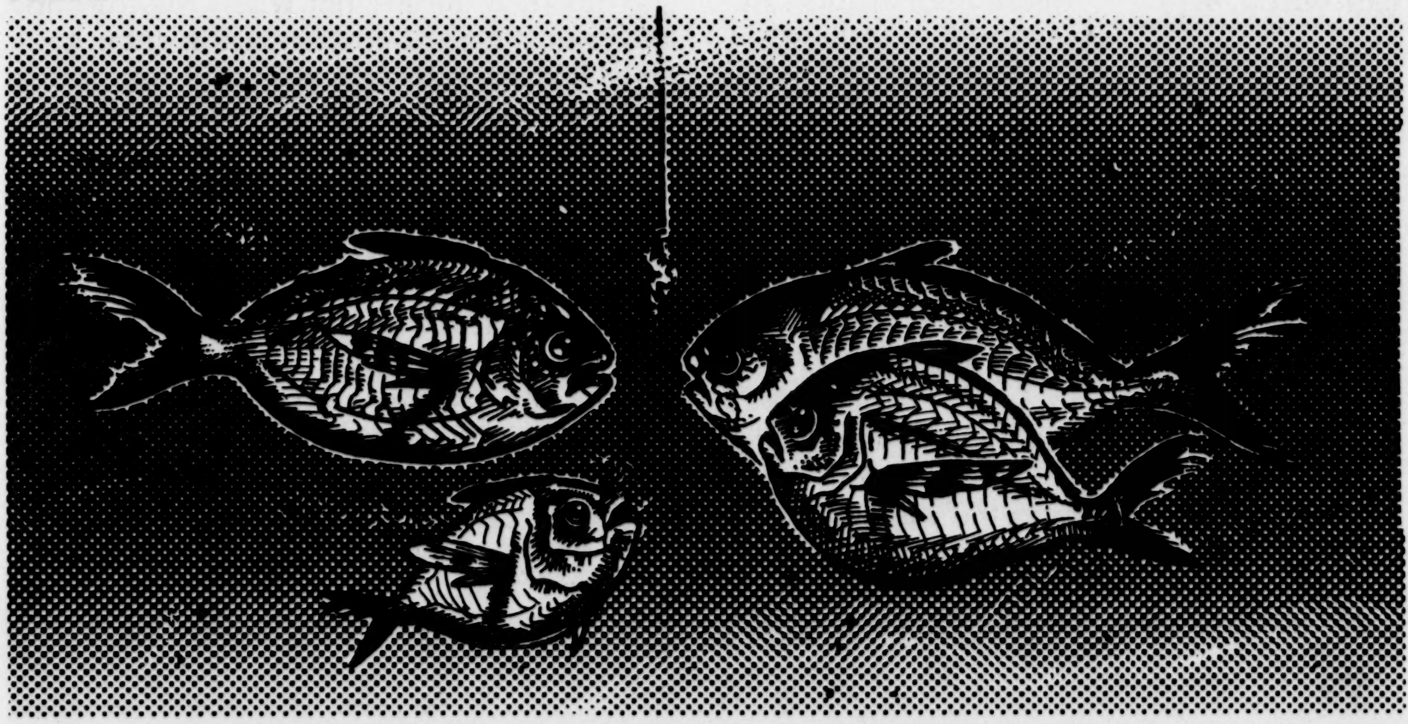
> Though inland far we be,
> Our Souls have sight of that immortal sea
> Which brought us hither . . . .

By shifting my position on the blanket, I could keep the rod tip centered in the moon and study its nodding dance, as lobsters and porgies, small bottom fish about the size of butterfish, peck at the bait — tap, tap, bend an inch, upright, tap and bend. I would turn the crank once in a while to keep the line taut. Usually when the tip stayed still for a few minutes after the dance, I'd figure, mostly rightly, that the lobsters and porgies had shredded the bait clean, and I'd need another. The hope was always that something big would hit amidst the tiny furies.

This night they peck away as usual, but after I bring the bait back in to check it, I discover why squid is considered prize bait for this business. Its flesh is sinewy and elastic. The bottom snufflers can't break it down with their small teeth and clumsy claws. The squid stays on, ripening in the warm water, while the fury around it stirs up the interest of a good-size fish from way out, praise the Lord.

A half-hour of moon gazing and tip watching goes past until, as sharply and pleasantly as a slap on the back from an old friend who'd come up from behind, the fishing pole bends over halfway in a profound and respectful bow toward the

Butterfish



Squid

open sea; the bait has been grabbed out there in the darkness and the deep. I leap to my feet, grab the pole out of its hole, point the tip at the sea, and run on bare feet to the edge of the water; this, so the fish won't feel any resistance to the meal and will start to work it past his lips and into his jaws. This fish is feeding ruminatively, after all. The last step at the water's edge ends in a jump, coming down with feet braced as if the pole held out flat and straight in front were the hawser in a tug of war. Then with knees bent, and because I am feeling theatrical and unobserved, and king of the whole damn world, with a shout, I pull the pole back with all my might and — ah, the hook catches, and oh the line whizzes off the spool against the drag, and the fish is on.

The freshly hooked bluefish at first runs out to sea against the drag, then in toward the shore while I frantically reel in line, hoping the sudden slack isn't from a break. When I feel the line tighten, the fish does too, and heads out again. A big one like this goes in and out several times, then settles down to lateral runs parallel to the edge of the shore.

I FEEL the fish's fear of the force pulling it away from its world, like the fear of the thousands of once-living fish this one had to have eaten to have gotten this big.

I run the beach, keeping the line as short as possible between the fish and me so that it won't stretch so much and be liable to break with a quick fish jerk. I run a hundred yards to the left, away from my candle, barefoot, in the moonlight, with a big fish on, over sand that holds no rocks to bruise the feet. Then to the right, past the candle, then to the left again as the fish doesn't tire; and there is no one there but the fish and me and both of us stripped down to just ourselves.

The mind runs too, through fears and out again. I'm always afraid I'll lose the fish while it plays. I wonder what it is and how big it is, not allowing myself to hope too much, trying to keep the disappointment of losing down low, but never succeeding at this mental game. Losing one you hooked was always feeling jilted bad, hard, by someone you really wanted. I fear my prey in a more basic way as well. Until this moment the fish had been master of a violent, vast world of water I couldn't endure for more than a few minutes at its level. A bluefish has teeth and muscles in its jaw that can snap off a finger or badly wound a hand. All the while I feel the fish's fear of the force pulling it away from its world, like the fear of the thousands of once-living fish this one had to have eaten to have gotten this big.

But my fears edge into gratitude, overwhelming gratitude for the way fishing works, as the fish tires and I work it into shore. There's an even moral balance, I think, to catching fish that are catching fish as violently with teeth and muscle as I with my hook and pole and body. Catching fish satiates a hunger for wild food to feed that part of the body and soul that cannot be satisfied completely by picking berries in a field, or gathering vegetables from a garden.

The bluefish has a clear eye as it flops on the edge of the shore. It catches a gleam of the moon. It doesn't flinch as I raise a hand gaff over my head and bring the great hook into its body right beneath the head, and carry the twisting weight and its horrible teeth at a painful arm's length away from my side. I lay it down on the rocks so its sides won't get encrusted with sand, and whisper reverently, "That's a big bluefish." I brain it with a stone until it's still. I haul it over my shoulder, the gaff hook in its lip. Its weight is cool on my back.

It weighs 18 pounds on the bathroom scale. I cut six pounds of filets off its sides. In its belly I find parts of mackerel, porgy, and crab. I bury the carcass in the garden compost heap by moonlight. By this time, had I not had my own designs, the bluefish would have half digested the squid. ■

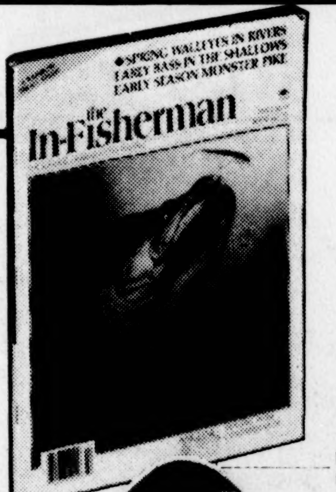
The In-Fisherman

The Lindner Brothers not only have good fishing programs on TV and radio, but they produce a good freshwater fishing magazine as well: ***The In-Fisherman****. It puts all those other combination hunting-and-fishing magazines to shame.*

They have good articles on structure fishing and other techniques to make you a better fisherman. But I think what makes them best is that they look into more scientific aspects of fishing such as . . . "How Water Color Affects Fish Location and Behavior" or "How to Deal with Contaminants While Angling in the 80s."

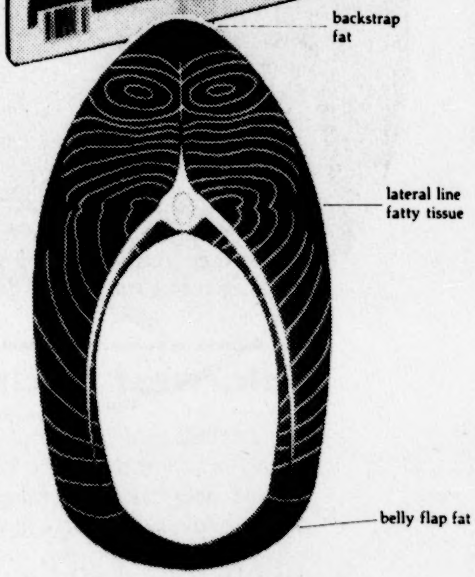
—Chuck Glossenger

The In-Fisherman
(The Journal of Fresh
Water Fishing)
David Csanda, Editor
$15/ year (6 issues)
from:
The In-Fisherman
P.O. Box 999
Brainerd, MN 56401


SPRING WALLEYES IN RIVERS
EARLY BASS IN THE SHALLOWS
EARLY SEASON MONSTER PIKE
the In-Fisherman

Removing Toxins Through the Cleaning Process

It is also possible to significantly reduce toxin levels by following proper cleaning procedures. Because toxins, with exception, usually accumulate in the fatty tissue of fish, the basic guideline to follow when cleaning fish is to get rid of as much fat as possible. The tissue with the highest fat content is always found in the belly flap area, along the lateral line and in a string along the back called the "backstrap." Proper cleaning procedures reduce or entirely remove these areas.



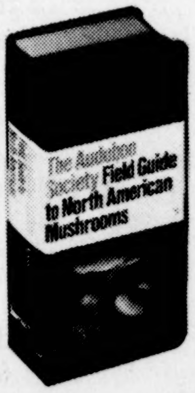
Concentration of Contaminants

The Audubon Society Field Guide to North American Mushrooms

What a pleasure. After too many coffee-table field guides, Audubon has published a great one. The photos, the keys, and the text all work together. Replaces everything except specialty local guides. (Dear Audubon, you must use Latin names under the photos. Stop fabricating delightful but silly English proper nouns. Lawn Mower's mushrooms. Woolly Fiber Head. Alcohol Inky. Really!)

—Peter Warshall

The Audubon Society Field Guide to North American Mushrooms
Gary H. Lincoff
1981; 864 pp.
$13.50
postpaid from:
Alfred A. Knopf, Inc.
400 Hahn Road
Westminster, MD 21157
or Whole Earth
Bookstore



440 Pig's Ear Gomphus
Gomphus clavatus **(Fr.) S.F.G.**
Cantharellacae, Aphyllophorales

Description: ***Violet to buff, smooth to scaly mushroom with wavy margin; undersurface buff, violet, or ochre, wrinkled to ridged.***
Mushroom: 1-4" (2.5-10 cm) wide; often overlapping in clusters to 6" (15 cm) wide; compressed and somewhat fused, cylindrical to blunt, center sunken, margin becoming elevated and wavy; moist to dry, hairy to somewhat scaly in center, smooth at margin, violet, becoming yellow-buff. Flesh thick, brittle, whitish to buff; odor and taste not distinctive . . . .

Season: August-October.
Habitat: Scattered to clustered, on the ground under conifers, especially spruce and fir.
Range: Across N. United States; Pacific NW. to California.
Comments: common in fall in coniferous woods of the Pacific Northwest. The wavy cap sometimes resembles a pig's ear, but this common name is also used for entirely unrelated mushrooms, such as ***Discina perlata*****.**

The Hunt

John Mitchell, an editor at ***Audubon*** *magazine, has done the impossible: a balanced, informative, heartfelt, and sometimes even funny view of hunting, hunters, and antihunters. This should interest you even if you don't care about the issue, because it goes to the root of attitudes about land and wildlife. It is especially worth reading if your mind is already made up on either side of the issue — it will, and should, make you a little uncomfortable. I only wish they had published the letters that accompanied the part published in* ***Audubon*** *— astonishing ugly craziness from both sides. Later the tide turned in favor of Mitchell. Read and see why.*

—Stephen Bodio

The Hunt
John G. Mitchell
1980; 243 pp.
$5.70
postpaid from:
Penguin Books
299 Murray
Hill Parkway
East Rutherford, NJ
07073

THE HUNT
BY JOHN G. MITCHELL

•

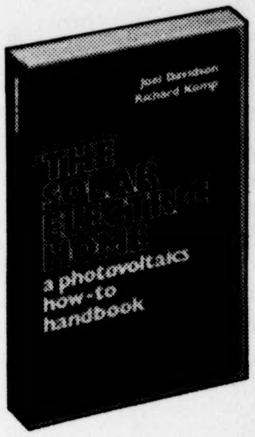
The moralistic anti-hunter is a breed apart. What most concerns him is not the perceived suffering of a hunted animal but rather the "uncivilized" behavior of the hunter. Possibly to justify their belief that killing wild animals is indeed uncivilized, some moralists purposefully place recreation and subsistence hunters in the same lineup with leg-hold trappers, varmint shooters, predator poisoners, seal clubbers, whalers, and assorted other killers whose procedures are even more distasteful to the public. To the extreme moralist, all of it is hunting and it is all wrong. And on occasion, a few display their real feelings about both man and beast. (I was talking once with a woman who grew up in New York City and now lives in a Connecticut hill town where deer feed on her front lawn in April and in November get shot at by hunters in the woods. She said she loved the deer. And the men who shoot at them? *'Those bloody lousy hunters,' said the woman through clenced teeth. 'They're no better than animals.')*

The Solar Electric Home

This is a starting-from-scratch manual you'll probably find essential for equipping your home, RV, or boat with photovoltaic panels. It's based on field experience — the only kind to have in this relatively new game. Unrealistic hopefulness is mercifully absent. My own system would have taken a lot less time to do right if I'd had this book four years ago. —*J. Baldwin*

The Solar Electric Home
Joel Davidson and
Richard Komp
1983; 200 pp.

$10
postpaid from:
Aatec Publications
P.O. Box 7119
Ann Arbor, MI 48107



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Tracking the sun from east to west can increase your electrical production 20 to 40 percent, depending on the time of year. For very small arrays that are easily accessible this may be a good way to go.

An ARCO Solar panel on a Zome-works passive tracker at the home and workshop of Paul Wilkins.

Solarwest Electric

You can tell that a technology has matured at least into young adulthood when a catalog like this one can be printed with a straight face. Here we have complete photovoltaic systems all ready to go. Complete, everything included sets are offered for such diverse duties as water pumping, boat and RV battery charging, and photovoltaic panels plus gasoline/diesel generator backup. No need to experiment, no utterly unknowns, no creepy jokes from friends. Just entirely professional merchandising and marketing of proven hardware systems. And, as you might expect, prices reflect the amount of work that has been done for you, just as with other industrial goods. Good for impressing your bank's loan officer, though, and just the thing for those who prefer to leave the experimenting to somebody else. —*J. Baldwin*

Solarwest Electric
Catalog
$5
postpaid from:
Solarwest Electric
232 Anacapa Street
Santa Barbara, CA
93101

•

There are five sizes of DC Power systems, with power ratings of 30-240 peak watts. These provide power budgets of 125 to 1,000 watt hours per day. The basic systems are complete with ARCO Solar M-61 solar modules, Delco batteries, a basic metered control panel, connecting wire, cable, and installation instructions. Options include the M-51 or 16-2000 modules, mounting structures, DC-to-AC inverters, the MCP-2 control panel, and extra batteries.

DC Power Systems

SIZE	**PRICE**
(125 watt hrs/day)	829.00
(250 watt hrs/day)	1,364.00
(500 watt hrs/day)	2,434.00
(750 watt hrs/day)	3,504.00
(1,000 watt hrs/day)	4,574.00

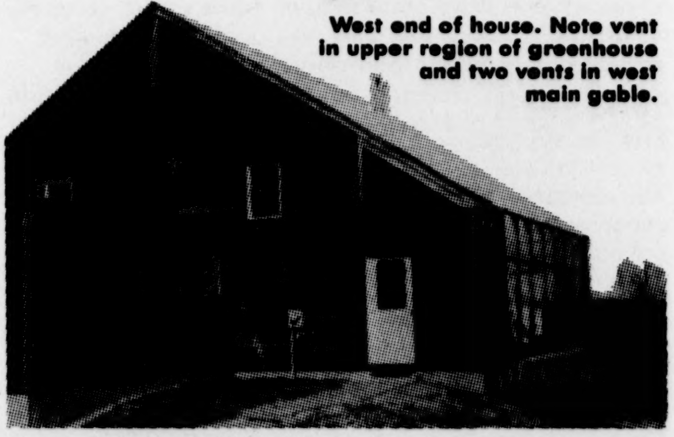
Saunders Shrewsbury House

I'll quote the cover: "No furnace, no woodstove. Week-long carry-through. Nothing to adjust each day. No thermal shades. Huge south windows. Twelve non-south windows. Fresh air input at all times. Cool all summer. Integral greenhouse. Cost same as for conventional house." Wow! (The wow is mine.) That's a relatively grandiose 2450 square foot house too, and it's in Massachusetts, where things get pretty untidy meteorologically. Moreover, there aren't any weird looking solar thingies cluttering up the living space. You should know, too, that many famous solar experts have repeatedly warned not to attempt 100 percent solar houses. Few people have. But this house is 100 percent solar, and it works well without NASA-grade tricks. How? Well, it's a complex matter. That's why it takes an entire book to describe it. Mr. Shurcliff, as usual, does a fine job of showing us around the place. You should come along! —*J. Baldwin*

Saunders Shrewsbury House
W.A. Shurcliff
1982; 106 pp.
$9
postpaid from:
W.A. Shurcliff
19 Appleton Street
Cambridge, MA 02138

SAUNDERS SHREWSBURY HOUSE
100% SOLAR HEATED FULLY AUTOMATIC TRULY LOW COST
by
W.A. SHURCLIFF

West end of house. Note vent in upper region of greenhouse and two vents in west main gable.



The Integral Passive Solar Water Heater Book

"Integral" means that the heater both heats and stores the water. The designs shown are proven. They range from a few bucks (made from truck inner tubes) to fancy contractor models. There are Clever Details, such as using old refrigerator cases as the box for a "breadbox" type heater. Lots of facts learned the hard way are shown together with field-tested procedures for such touchy problems as: How do you get the thing up onto the roof? And it is all presented in a friendly, nontechnical way so most folks will be able to use what's shown here easily. For dessert, there's a catalog of commercially available models. Nice job. —J. Baldwin

The Integral Passive Solar Water Heater Book

The Integral Passive Solar Water Heater Book
David A. Bainbridge
1981; 99 pp.

$10.95
postpaid from:
Passive Solar Institute
P.O. Box 722
Davis, CA 95617
or Whole Earth Bookstore

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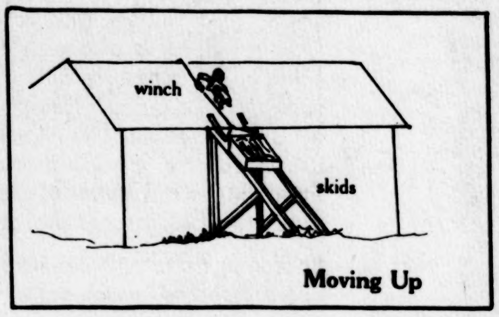


Moving Up

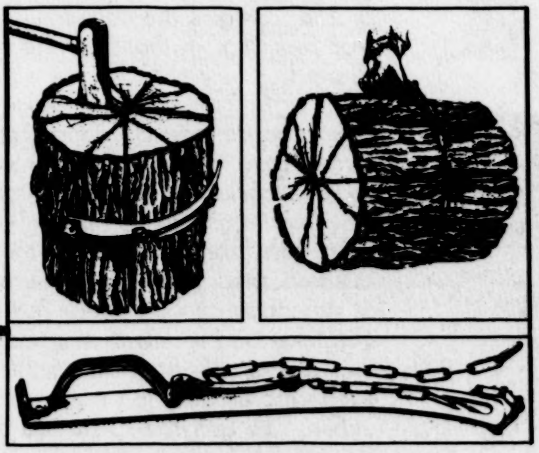
The design of your heater should also reflect the location and method you will use to install it. Building the heater in place is often the easiest method. If that would be awkward or inconvenient then consider building it in sections (a prefabricated heater) that can be moved easily and assembled on location. The third option is to build the complete heater and then move it into place. This can be difficult with the large IPSWH's — weighing 200+ pounds (90+ kg) empty — but it is a feasible project. I would put skids from ground to roof and then winch the heater up. Lay down plywood or wood strips to protect the roofing material.

Pro-Log

I've heated exclusively with wood for a long time, and I've tried a number of gimmicks recently available to wood-cutters. In general, I find several have limited usefulness and many are worthless. A good splitting maul is the best way to split wood. The Pro-Log however, is a very helpful tool. Rather than trying to improve on the actual splitting process, it offers a real solution to the sorely neglected handling problem. The Pro-Log is essentially a band that goes around a billet (or two or three if they're small) before splitting. It holds the pieces together and upright so they can be split repeatedly without bending over to retrive them. I used to use two tires bolted together to do the same thing, but the Pro-Log does it better. The second advantage comes after the wood is split. Instead of picking up lots of individual pieces from the ground (or out of the tires) I grab the handle and carry one bundle to the woodstack. I have to admit I was a bit skeptical at first, and it took a few tries to master it, but I don't split wood without it now. The Pro-Log really saves a lot of time, not to mention bending. It seems well designed for the intended task, and the handle is big enough for me to wear my gloves. The adjusting and locking system (like a log chain grab hook) is quick and positive. I've split about eight cords with mine and it's still going strong even though I have hit it a number of times.

—Bill Sterling

Pro-Log
$16.70
postpaid from:
Ironics
1102 Kelly Road
Bellingham, WA 98226
Or check your local hardware store



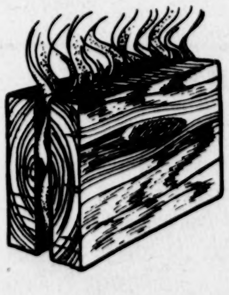
Jay Shelton's Solid Fuels Encyclopedia

*Jay Shelton has been associated with safe wood burning for some time now (**NWEC** pp. 204-205). It's no surprise that he's the author of this finely detailed presentation of just about everything you'd ever need to know about heating with wood or coal safely. A discussion of codes is included. Much of the information in the book is the result of the author's laboratory testing of things that have needed verification for a long time. I'm glad someone has finally done the deed and written it up so nicely for us. —J. Baldwin*

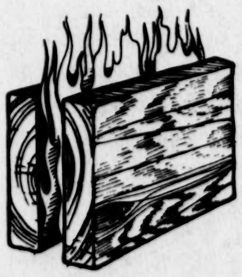
Jay Shelton's Solid Fuels Encyclopedia
Jay W. Shelton
1983; 268 pp.

$14.95
postpaid from:
Garden Way
1515 Ferry Road
Charlotte, VT 05545
or Whole Earth Bookstore

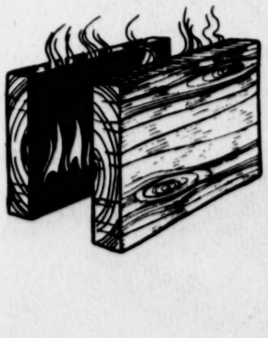
JAY SHELTON'S
SOLID FUELS ENCYCLOPEDIA



When too close together, not enough air can get in; the fire smolders or goes out.



With appropriate spacing, there is enough air and mutual heating to sustain good combustion.



When too far apart, too much heat is lost to sustain pyrolysis, and the fire goes out.

Roblon Spunflex rope

The ideal general-purpose rope is strong, resists rot, chafe, and mildew, and is relatively inelastic, like Dacron. But it is also easily spliced, comfortable to handle, attractive, retains its lay, and holds up well in sunlight, like Danish hemp. Finally, it is cheap and readily available, like Manila hemp. After widespread use in Europe, a rope that approaches this ideal is available in this country. It's called Roblon Spunflex, and not only does it meet the above criteria — it even floats.

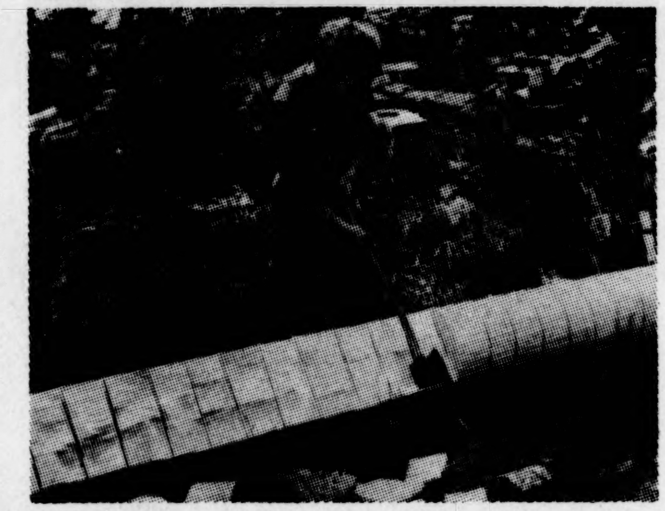
Roblon is an ultraviolet-stabilized split-fiber polypropelene, much softer and more supple than ordinary polypro, yet not inclined to hockle, flatten, or chafe internally. As for durability, I've seen pieces that had gone through four years of charter-boat work in the tropics that were still serviceable.

Designed for marine use, Roblon has proved itself on farms, in shops, and in forests; if I could have only one kind of rope, this would be it. —*Brion Toss*

Roblon Spunflex rope
Information and price list

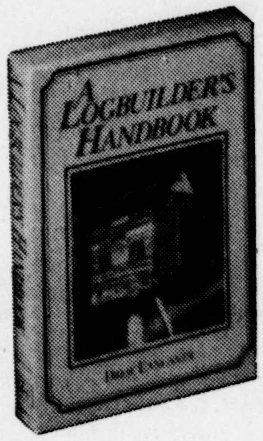
free from:
Roblon West
4413 Tarpon Lane
Alexandria, VA
22309

A Logbuilder's Handbook



Chopping off scored pieces which are sometimes called "juggles."

It was only a question of time before Drew Langsner built a house. His wonderful **Country Woodcraft** *(***NWEC** *p. 250) remains the definitive modern text on traditional woodworking. In that book he and his good wife Louise showed us how to make the equipments for everyday living right from tree to end-use. By hand. Now they've built a house, also by hand. This enterprise goes lots further than the usual make-it-yourself efforts that infest the bookracks of your local health food store. No chainsaw lumbermills here, nossir. They hew the logs into joists with a broadaxe! Even the door hinges and latches are fashioned from wood. The house combines the best of American and European log technique. The text is nurturing and redolent with that special glowing detail that comes only from true mastery. If log houses have ever tempted you, this book will likely push you into action. The Langsners also run a school on the subject, Country Workshops.* —*J. Baldwin*



A Logbuilder's Handbook
Drew Langsner
1982; 236 pp.

$9.95
postpaid from:
Rodale Books
33 East Minor Street
Emmaus, PA 18049
or Whole Earth
Bookstore

Country Workshops school
Catalog **free**
Send SASE to:
Country Workshops
Route 3, Box 262
Marshall, NC 28753

•

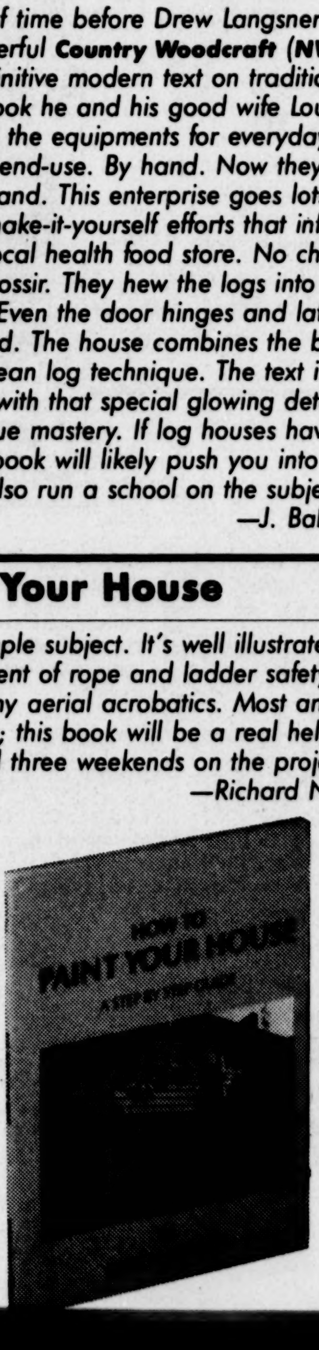
Multiple Floors? An early decision either to build up (multiple stories), or spread out (single story) will influence many design and construction details. With the exception of some small sheds and very old dwellings, log construction throughout much of Europe is multistoried. The advantages of multiple floors, rather than a rambling, spread-out approach, are numerous. There is a saving in materials and labor in constructing the roof, flooring and foundation. Heating and cooling is simpler and more efficient. The vertical design minimizes interior walls and hallways, resulting in simplified construction and better interior lighting. Dark, cold back rooms can be eliminated. Multiple levels help achieve a sense of privacy in a compact building. Also, building upward increases the view (from upstairs) and uses less ground area. In some cases, the extra height can provide better exposure to sunlight for solar collectors.

How to Paint Your House

A simple book on a simple subject. It's well illustrated and has a good treatment of rope and ladder safety that should eliminate any aerial acrobatics. Most anyone who is handy can paint; this book will be a real help if you would rather spend three weekends on the project instead of three weeks. —*Richard Nilsen*

How to Paint Your House
Kirk Harbeck
1982; 55 pp.

$8.95
postpaid from:
McDaniel House
Publishing
P.O. Box 13265
Portland, OR 97213



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Don't buy cheap paint brushes. They're like most free advice: You get what you pay for. You can buy brushes two-for-a-dollar at discount stores, but they don't even make good dusters. Cheap brushes don't hold enough paint, they're messy because they don't release paint evenly, and they're almost impossible to cut a straight line with. Buy your brushes at the paint store where you get your paint, and ask the clerk for good ones. (Good brushes usually come with heavy paper covers for the bristles. Save these covers and store the brushes in them when not in use.)

You can get almost all the thinner out of a brush by spinning it between your hands.

Maps

A couple of my chums, one a university cartographer and the other a map librarian, slight this book because "there's nothing new in it."

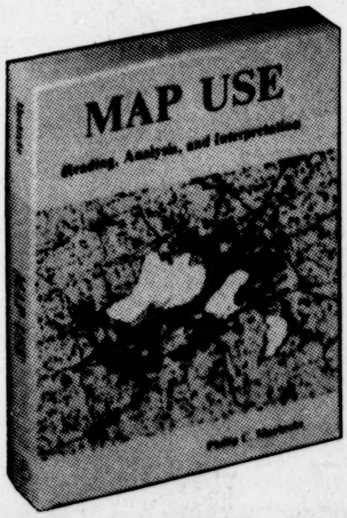
When I make a map I try to put down familiar terrain as a secure base for the reader, then pile new stuff on top of that. Thus recognizable continent shapes, names of places everyone knows, and highways leading from where-you've-been. That's part of the universal appeal of maps I think: They can suck you in with two places you know and then reveal a third you never knew was there, or describe exotic people way across the globe who live very differently in a landscape just like your own. Much the same with this book. There **is** *a little which won't be new: A couple road maps, the justly famous London Underground diagram, then . . . POW! city views, including Cortes's own 1523 map of Tenochtitlan (now Mexico City) and an ultra-slick downtown Manhattan. Maps that teach — even maps you can walk through. There are terrain maps and models and dozens of computer-generated examples, and aerial and satellite photos and other remotely-sensed maps. But there is nothing superfluous; no map fluff.*

For the person called upon to make a map — and do it elegantly — this book should provide several exciting solutions to many mapping problems. For the cartophiles among us the book is a gem. Should have been called **Maps!** *(exclamation).* —*Don Ryan*

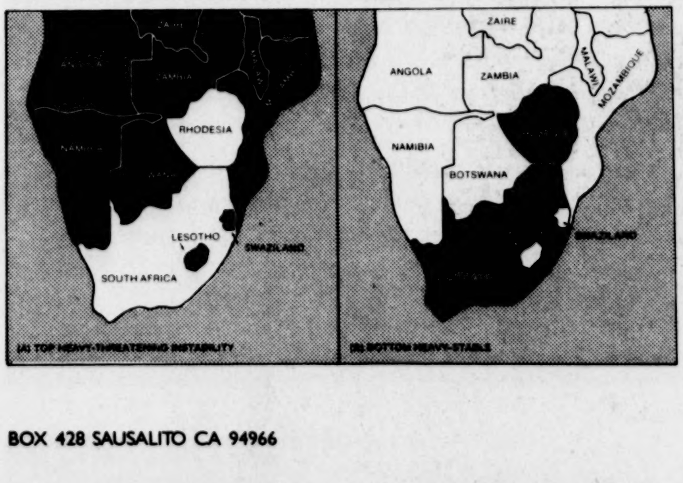
Map Use

If I had to limit myself to one book about maps, this would be it. It is, quite simply, the best introduction to maps and their uses that I have yet seen and a good general introduction to the technical side of mapmaking and map using. The illustrations illustrate the cartographic concepts very well. The authors do an excellent job of reminding the reader that the map is **not** *the territory and that maps can be used to abuse as well as enlighten.* —*Ron Henricks*

Map Use
(Reading, Analysis, and Interpretation)
Phillip C. Muehrcke
1978; 477 pp.
$17.95
postpaid from:
J.P. Publications
P.O. Box 4173
Madison, WI 53711



The visual balance of map symbols can be modified to create different impressions.



Participatory Map: Community-Made Map, Hill District, Pittsburgh. Rarely does one encounter such a large map — 25 by 40 feet. Produced piece by piece by community residents in a Pittsburgh neighborhood, it is a walk-on map. The intention was not precision but identification and expression of resources, problems, and attitudes in the neighborhood; it is filled with judgment, preferences, and omissions. The participatory development and large scale of such maps make them valuable in community planning and education.

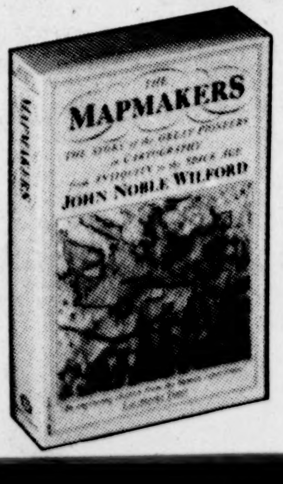
Maps
(A Visual Survey and Design Guide)
Michael and Susan Southworth
1982; 222 pp.
$39.95
postpaid from:
Little, Brown and Co.
200 West Street
Waltham, MA 02154
or Whole Earth Bookstore

The Mapmakers

The author of **The Mapmakers** *is a science writer for the* **New York Times** *and he explains complex subjects simply. His book is technical and easy to read at the same time. I've loved maps for years, and this book only increases my respect for the mapmakers over the centuries, from Eratosthenes measuring the size of the Earth more than 2000 years ago to the scientists and artists and computers mapping Mars.*

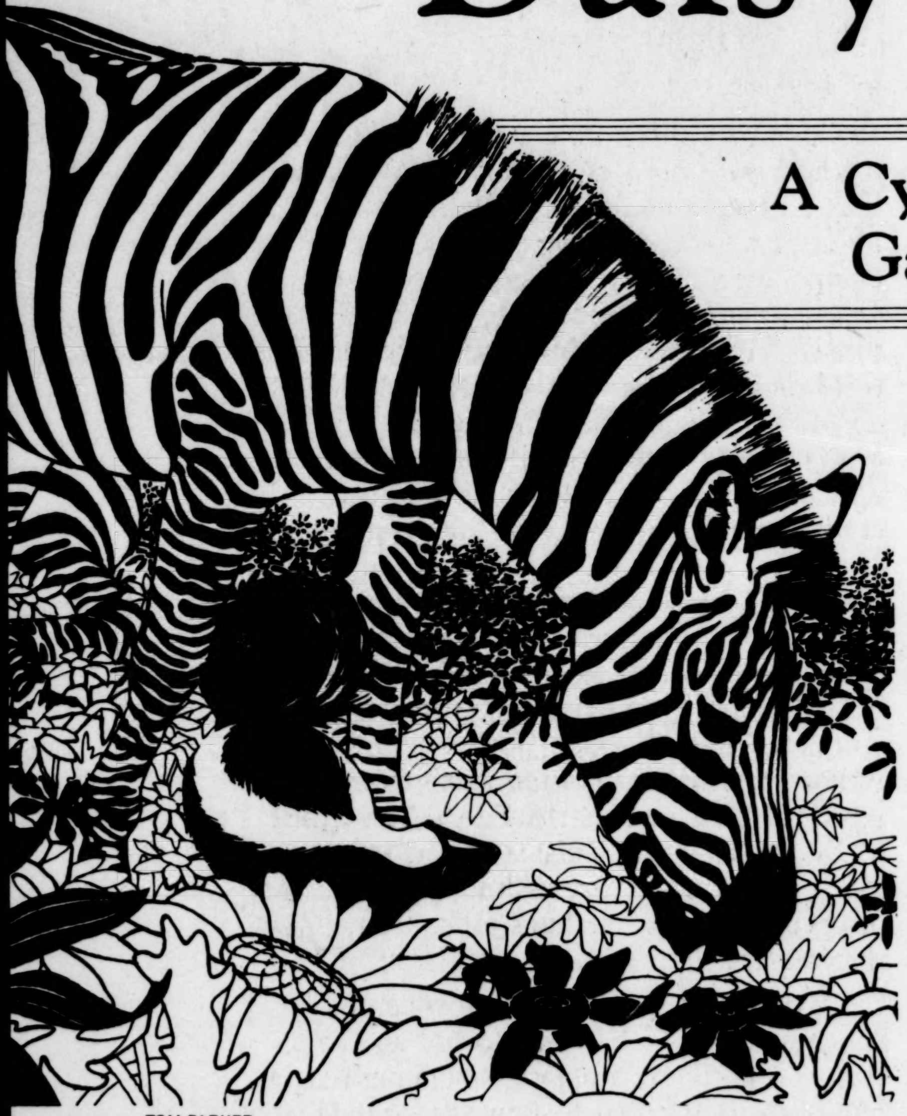
Wilford enjoys the journey and offers lively glimpses of world history from a cartography viewpoint — the misguided reasoning which send Columbus off on a short voyage to Japan; the problems faced by French scientists measuring the length of a degree in Lapland and in Ecuador; the 40-year struggle by John Harrison to build a clock accurate enough to fix longitude; the increasing sophistication of techniques for mapping Antarctica, a land largely covered by ice.
—*David Millstone*

The Mapmakers
John Noble Wilford
1982; 417 pp.
$9.95
postpaid from:
Random House
400 Hahn Road
Westminster, MD 21157
or Whole Earth Bookstore



Daisy World

A Cybernetic Proof of the Gaia Hypothesis



TOM PARKER

by James E. Lovelock

IT IS NOW JUST OVER TEN YEARS since Lynn Margulis and I published our first paper on the Gaia Hypothesis.[1] You may be wondering what has happened in the meanwhile.

You will have noted that the idea does not yet seem to have set big science on fire. This is not too surprising, for many famous scientists in the past, including such names as Redfield, Hutchinson, and Sillen, touched on the idea without managing to convince their colleagues. One of the extraordinary things about science is that whilst it swallows the intricacies of relativity and of genetics, it has never been comfortable with whole systems; witness the unpopularity of cybernetics. How

In his book **Gaia: A New Look at Life on Earth (NWEC** *p. 7) British scientist Lovelock defines the Gaia Hypothesis so:*

"It postulates that the physical and chemical condition of the surface of the Earth, of the atmosphere, and of the oceans has been and is actively made fit and comfortable by the presence of life itself. This is in contrast to the conventional wisdom which held that life adapted to the planetary conditions as it and they evolved their separate ways."

As Lovelock notes, there is a peculiar silence going on. Lovelock is widely respected, his book got warm reviews in **Scientific American, Science,** *and such places, and the Gaia Hypothesis is well known and well regarded. But it is not being challenged — or even discussed — in the scientific literature. In a computer teleconference I'm in I raised the subject, and British anthropologist Mary Douglas had this to say:*

"Why should people who are really worried about nonrenewable resources and irreversible damage to the environment take so little notice of a well thought out, optimistic message? . . . . You might start by generalizing the problem, and ask why pessimistic theories are more readily credited than optimistic ones in this part of the century . . . . What are the funding agencies looking for? Trouble-shooting research. There is this problem here, or that problem there. The competitive research tenders have to show that they can see the urgent problems and that their project might solve one of them . . . . That is why no one has had time to look at Gaia's hopeful scenario."

Since cybernetics was kidnapped by computer science a couple decades back, there have been few working applied cyberneticians loose in the world. Lovelock, holder of innumerable patents in gas chromatography and related fields, visiting professor in the Department of Cybernetics at Reading University, is one. May he and Gaia inspire more.

"Daisy World" is so simple a proof you could run it on your, um, personal computer. Jim did.

This article is rewritten from a recent collection of papers, **Biomineralization and Biological Metal Accumulation** *(1982, $69.50 postpaid from Kluwer Boston, 160 Old Derby Street, Hingham, MA 02043).* *—Stewart Brand*

Global homeostasis does not need foresight or planning by life.

many universities, I wonder, have departments of cybernetics?

I suspect that most scientists still reason in the cause-and-effect manner set by Aristotle. The circular and recursive logic of whole systems is alien to them. This is especially true of geologists, geochemists, biochemists, and exobiologists who might otherwise have been interested in Gaia.

It is true that engineers and physiologists are enlightened by their professional need to lift themselves from the narrow trough of linear thought. Unfortunately they tend to keep the conspicuous advantages of whole systems thinking to themselves.

The only constructive criticism we have so far received is from biologists, notably Ford Doolittle in **CoEvolution**[2] and Richard Dawkins in his recent book.[3] Both of them thought that Gaia could not exist, for altruism global in scale would require foresight and planning by the biota, which is inconceivable.

The purpose of this article is to review the evidence for Gaia and to present a simple model, called "Daisy World," specifically developed to show that global homeostasis does not need foresight or planning by life.

What is Gaia?

The Gaia Hypothesis arose directly from the planetary exploration programme of NASA. There was a need to discover in advance of a landing mission whether or not a planet such as Mars bore life. In 1966 Dian Hitchcock[4] was able to show that information on the atmospheric composition of a planet was sufficient as prima facie evidence of life. The method was based on the high probability that planetary life, through its use of the atmosphere, would drive the chemical composition of this medium far from the near-equilibrium steady state of a lifeless planet. This detection method when applied to Mars strongly indicated it to be barren, a conclusion highly unacceptable to exobiologists at that time. The same method applied to the Earth indicated the near certainty of the presence of life. It also suggested that the atmosphere was more than just a biogeochemical mixture. It appeared to be actively maintained in composition at close to an optimum by and for the biota. This way of thinking about the planets was a stunning discouragement for exobiologists whose scientific inspiration came from the search for life outside the Earth. Some part of the tendency by space scientists to ignore the joyous counterpart of this approach, the discovery of Gaia, perhaps arose from their disappointment.

The evidence drawn from atmospheric compositions which points to life and to a control system on a planet is summarised in **Figures 1 and 2**, which show the abundances and the fluxes, respectively, of the gases of the present atmosphere compared with those of an abiological Earth. From these diagrams it is clear, as has been argued in previous papers, that the atmosphere is a highly reactive mixture which would but for life rapidly revert to the stable inert condition of the abiological state. It is the intense disequilibrium of the atmosphere which advertises the presence of life on Earth. It is the maintenance of this reactive and unstable

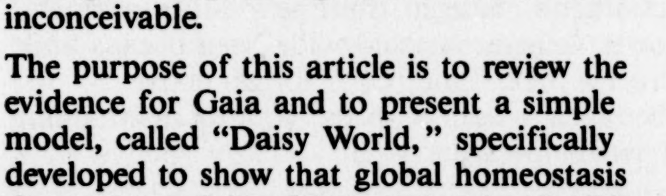
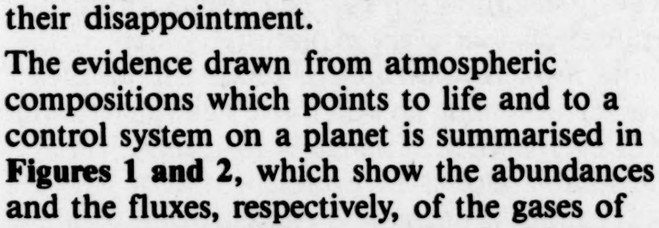


Figure 1. The abundance of gases in the present atmospheric gas flux compared with that expected of the abiological steady state.



GRAPHS BY DON RYAN

Figure 2. The fluxes of gases (gigamoles per year) through the present atmosphere compared with those expected for the abiological steady state.

It is the intense disequilibrium of the atmosphere which advertises the presence of life on Earth. It is the maintenance of this reactive and unstable atmosphere at a steady state for times much longer than the residence times of individual gases that suggests the presence of a control system, Gaia.

atmosphere at a steady state for times much longer than the residence times of individual gases that suggests the presence of a control system, Gaia.

Feedback and Homeostasis

Many geochemists now accept that the Earth's surface features are a result of the coevolution of the biota and the rocks. But they still see the association between life and its environment as passive. Life adapts to environmental change and the evolution of life may change the environment, but any feedback, negative or positive, between these processes is passive. In sharp contrast the Gaia Hypothesis sees the Earth as homeostatic, with the biota actively seeking to keep the environment optimal for life.

The first intimation of Gaia comes from the realisation that every evolutionary step of the biota must to a greater or lesser extent alter the environment in which the next generation will evolve. If the change is to a more favourable global environment then it will carry more progeny and the environmental change will be reinforced. In the same way a less favourable environment will carry less progeny and hence their unfavourable attributes will become attenuated.

It is not immediately obvious how such a course of events could lead to planetary homeostasis. As Ford Doolittle observed, the biota have no capacity for conscious foresight or planning and would not in the pursuit of local selfish interests evolve an altruistic system for planetary improvement and regulation.

The sequential logic of descriptive writing is not designed for the concise explanation of control systems with their inherent circularity, recursiveness, and nonlinearity. Even the formalism of mathematics loses its elegance when an attempt is made to describe a simple nonlinear control system such as, for example, an electrical water heater controlled by a bimetallic strip thermostat. I have chosen therefore to present a simple model of an imaginary planet whose temperature is regulated at a biological optimum over a wide range of solar radiation levels as a working example of a Gaian mechanism.

Before describing this model it is useful first to consider the terms *active*, *passive*, and *feedback* in the context of their origin, namely systems engineering. **Figure 3** illustrates graphically the change of some intrinsic property of a system, such as temperature, with time when there is a constant flux of a related quantity such as heat. The diagonal line across the diagram represents the rate of rise of temperature of an inert body during the constant input of heat. Line (B) illustrates passive negative feedback such as might occur on a watery planet as a result of increasing cloudiness. Line (A) illustrates passive positive feedback such as could take place when an ice-covered planet reached the melting point of water and its albedo changed from near 1.0 to a much lower value associated with open oceans and crustal rock. Line (C) is for an active feedback system with the goal of maintaining a set temperature.

With the passive negative feedback some constancy is achieved but at a value arbitrarily set by the properties of water and which cannot be changed. With the active system, constancy is possible at any chosen

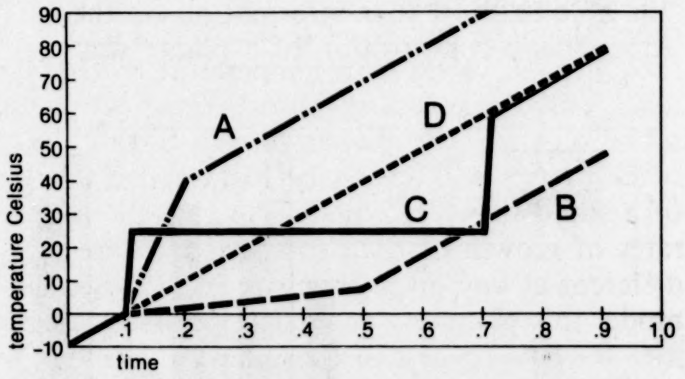


Figure 3. Passive negative and positive feedback processes, and active homeostasis. Energy is supplied at a constant rate to an object of unknown thermal mass. Line B illustrates passive negative feedback on the energy supply over a limited range. Line A represents passive positive feedback over the same range, and line C illustrates active regulation at a chosen set temperature. Diagonal line D shows the rate of temperature rise of an inert object.

Daisy World illustrates how the powerful capacity of life to grow until a niche is full acts as an amplifier, and natural selection acts as a sensor, in a control system which is able effectively and precisely to regulate planetary temperature at close to the optimum for the specified life form. No foresight or planning is required by the daisies, only their opportunistic local growth when conditions favour them.

value. Positive feedback is used constructively so as rapidly to reach the chosen level and negative feedback used to keep the constancy. Furthermore the chosen set point can itself evolve as part of a more intricate system of evolutionary change.

Walter B. Cannon coined the term *homeostasis* for those coordinated physiological processes which maintain most of the steady states of a living organism. Homeostasis is very much an active process, one in which any departure from the chosen state is sensed and the difference between preference and reality amplified and used to oppose the perturbation and so restore the status quo. The stability of such a system, the quality of its homeostasis, is measured by its capacity to withstand perturbations.

Now let us see how active regulation of a planetary scale might be achieved by the biota without the need for them to have foresight or receive divine assistance.

Daisy World

The dominant plant life of Daisy World are black and white daisies. They are grazed by grey cattle but both producers and consumers flourish when the climate permits. Both species of daisy are identical in every respect other than the colour of their flowers and their growth varies with temperature in the same way. Because they absorb more radiation the local temperature of a stand of black daisies will always be higher than that of a stand of white daisies. As a result the rates of growth of the two species will be different at any given intensity of sunlight. To model this planetary ecosystem let us assume that the two species of daisy have a growth rate (Beta) which varies with temperature parabolically as follows:

$$\text{Beta} = A + BT - CT^2$$

Where (A), (B) and (C) are constants chosen so that growth is zero at below 5 and above 35 degrees Celsius and a maximum at 20 degrees. These limits are those that determine the growth of most contemporary vegetation. Under cool conditions the growth of the black daisies, which are locally warmer than are the white, will be favoured. Under hot conditions the white daisies will have the advantage. The rate of spread of one species into the zone of the other is given by a relationship described and experimentally confirmed by Carter and Prince as follows:

$$dy/dt = \text{Beta}\ xy - \text{Gamma}\ y$$

Where (x) is the number of susceptible sites for growth and (y) is the number of infective sites. Beta and Gamma are the growth and death rates respectively.

Daisy World is a cloudless planet with no greenhouse gases. **Figure 4** illustrates the response of the mean planetary temperature with increasing solar luminosity. The dotted line illustrates the temperature of a barren planet and the solid line when the daisies are present. Daisy World illustrates how the powerful capacity of life to grow until a niche is full acts as an amplifier, and natural selection acts as a sensor, in a control system which is able effectively and precisely to

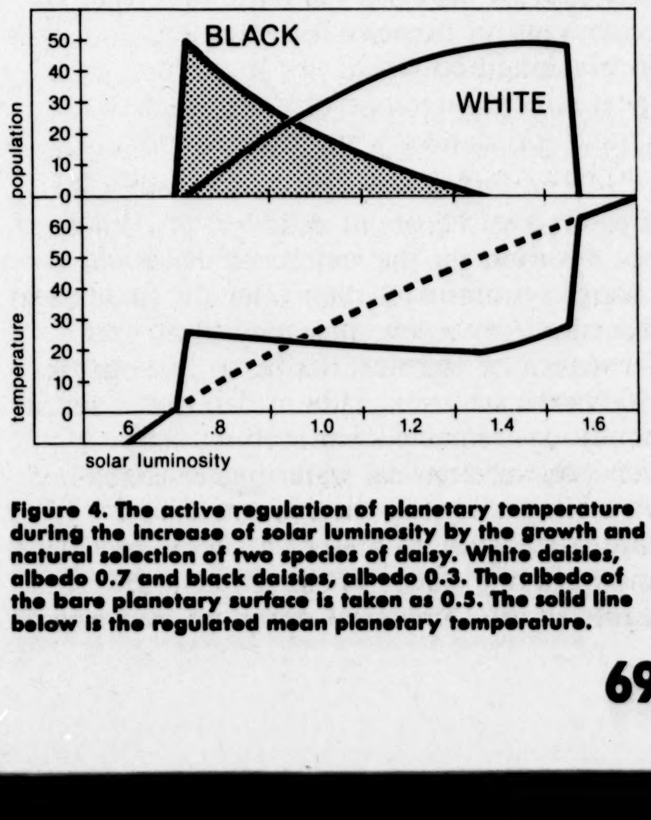


Figure 4. The active regulation of planetary temperature during the increase of solar luminosity by the growth and natural selection of two species of daisy. White daisies, albedo 0.7 and black daisies, albedo 0.3. The albedo of the bare planetary surface is taken as 0.5. The solid line below is the regulated mean planetary temperature.

Back 2.2 billion years ago, a nuclear reactor did not require the skill of a Ph.D. for its assembly; dumb bugs could do it. It is fortunate that the Earth did not become oxidising in the early Archean, for then the uranium was enriched close to bomb quality. Spectacular nuclear fireworks might have been more than the infant Gaia could have withstood.

regulate planetary temperature at close to the optimum for the specified life form. No foresight or planning is required by the daisies, only their opportunistic local growth when conditions favour them.

This type of model is not limited to the very artificial conditions of Daisy World. A more general version would take into account the possibility that once life appears on a planet geochemical evolution will be limited by the circumscribed set of physical and chemical constraints which characterize the biota. Any external or internal chemical or physical change away from this set of conditions will lead not only to adaptation but also to the selection of those organisms whose growth alters the environment so as to oppose the unfavourable development.

Past, Present and Future

The Gaia Hypothesis postulates the existence of active systems for the chemostasis and thermostasis of the planetary environment. It predicts that the environment has been and will be stable and constant in spite of perturbations, whether sudden or from some continuous and progressive change. Strong support for the hypothesis will therefore come from the discovery of instances where there was clear evidence of the rapid and effective restoration of homeostasis after known perturbations.

There are several examples of major perturbations during the course of the history of life on Earth. The first and possibly the greatest was the origin of life itself. Whatever the environment was before life it should have changed profoundly soon after the planet was colonised. We know that conditions were favourable at the start of life so it is worth asking the question: How was it that these conditions remained favourable in spite of the inevitable changes in surface, ocean, and atmospheric composition imposed by life? Thus the use of CO_2 as a carbon source by early photosynthetic life could have gravely disturbed the precarious radiation balance of the Earth when warmed by a cooler sun. It is interesting therefore to speculate on the composition of the Archean atmosphere after life began. There is evidence to suggest that the rate of carbon burial in the Archean was not greatly different from now. Much of the carbon entering present-day anoxic sediments is returned to the atmosphere as methane. If the Archean production of methane was comparable with that which is now produced, and bearing in mind that none of it would be oxidised by consumers in the anoxic Archean oceans, the flux to the atmosphere could have been substantial. In addition to methane, sulphur gases and possibly even nitrous oxide may also have been flowing into the Archean atmosphere. It would need a general circulation model to predict such an atmosphere in detail. But it can be speculated that the troposphere would have a net reducing tendency with abundant polyatomic organic gases present. The radiative properties of such an atmosphere would solve the infrared problems of less CO_2 and also serve if necessary to filter out ultraviolet radiation at wavelengths less than 300 nanometres. The well-established glaciation coincident with the first appearance of oxygen in the atmosphere at 2.2 billion years ago is consistent with the oxidative destruction of these organic gases.

The emergence of oxygen as an atmospheric gas may have been the largest perturbation the Earth has yet experienced. Significantly it was internally and biologically driven. The process of photosynthesis, whereby oxygen and carbon are segregated and some of the carbon becomes buried, ineluctably drove the planetary surface to ever more oxidising during the Archean. It is true that some of this tendency was offset by the return of reducing materials by tectonic processes, but until the critical problems posed by the presence of gaseous oxygen began to exert their effect on selection, oxidation proceeded unchecked.

Among the minor but startling problems posed by the appearance of oxygen would have been the speciation of the element uranium. In the reduced form uranium is safely locked as water insoluble material dispersed in a great dilution. In an oxidising environment uranium is water soluble and readily concentrated by microorganisms. This task was once successfully completed by microorganisms resident at a region which is now Gabon in Africa about 2.2 billion years ago. As a result a nuclear reactor commenced operation and ran for several million years. At that time uranium was substantially richer in the fissionable isotope U235 than now. In those days a nuclear reaction did not require the skill of a Ph.D. for its assembly; dumb bugs could do it. It is fortunate that the Earth did not become oxidising in the early Archean, for then the uranium was enriched close to bomb quality. Spectacular nuclear fireworks might have been more than the infant Gaia could have withstood.

By the time the metazoan biota were well established the presence of charcoal in the sediment provides a fossil record of ancient fires. The range of atmospheric oxygen over which fires can take place yet not be so devastating as to threaten all standing vegetation is 15 to 25 percent by volume. It is therefore tolerably certain that atmospheric oxygen has never ranged beyond these bounds in the last several hundred millions of years. This is a truly remarkable feat of regulation, for in the previous 90 percent of the Earth's history the pE has risen by at least ten units but is now held precisely constant. The mechanism by which oxygen is regulated is not yet known although we have proposed that the control of the proportion of carbon buried in the anoxic sediments, and hence the oxygen abundance, is achieved through the regulation of the venting of methane to the atmosphere. Interestingly, fires themselves exert a positive feedback on oxygen since carbon as charcoal is resistant to digestion by microorganisms and hence more is buried.

Throughout the existence of life on Earth there have been frequent collisions with planetisimals several kilometres in diameter, the most recent 65 million years ago. The impact energy of these collisions is vast enough to have caused major, albeit temporary, environmental changes, and was proposed by Alvarez and his colleagues as the cause of species extinctions in the fossil record.[5] **Figure 5** illustrates the impact craters so far discovered on the Canadian shield. Most of the events recorded by the craters represent an energy yield at the Earth's surface about 10^8 times larger than the detonation of the present global stocks of nuclear weapons. Although the consequences of these impacts are not yet known in detail they do act as impulse tests of the "black box" system. If and when a detailed description of the sequence of events at one of these collisions is uncovered it will chart the course of the perturbation and the rapidity and effectiveness of the return to an optimum environment which follows. It could provide important evidence about the existence and the nature of Gaia.

A progressive change in the environment which spans the past, present, and future is that which relates to the climate of the Earth. One of the more certain conclusions of astrophysics is that stars increase their radiation flux as they age. There is a consensus among astronomers that the sun was very probably about 25 percent less luminous at the Earth's origin than it is now. We know from the geological record that fluid water has always been present and from the origin of life that the climate cannot have been very different from now 3.5 billion years ago. In this context glaciations represent only minor departures from climatic constancy. Walker[6] proposed that a progressive decrease in atmospheric CO_2 from about 10 percent abundance at the start of life to the present 0.03 percent could through a decreasing greenhouse effect compensate for the progressive increase of solar luminosity. Although by itself carbon dioxide does not provide a very effective greenhouse, on the Earth its influence is amplified by the presence of abundant water vapor.

The mechanism by which CO_2 is varied inversely with the solar luminosity so as to maintain a constant temperature is the weathering of exposed calcium silicate rock. This is the only major sink for CO_2 from the atmosphere, and the rate of weathering has a positive temperature coefficient. Walker's proposal provides a plausible abiological mechanism for climatic and CO_2 regulation,

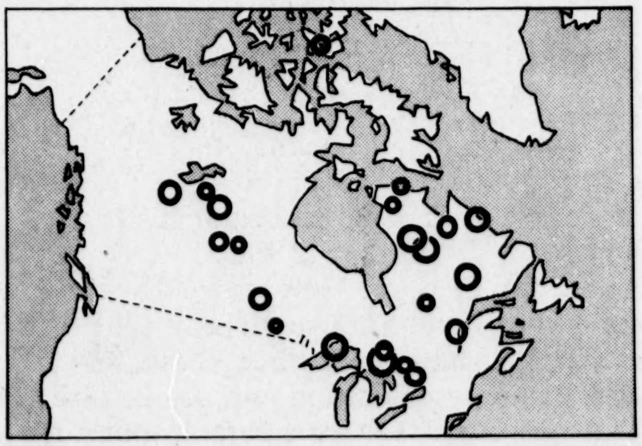


Figure 5. Map showing the impact craters so far discovered on the Canadian shield.

although with the present information on the fluxes of CO_2 it appears to be only partially able to account for the constancy of the climate throughout the Earth's history.

I do not disagree with the general basis of this interesting abiological control mechanism which would make Gaia redundant but wondered instead how much better it would work if life was included as a part of it. The real world is not abiological and the weathering of calcium silicate is very much a biological concern. At all levels from prokaryotic microorganisms to large trees and soil-moving animals the biota participates in the process of rock digestion. The partial pressure of CO_2 in the soil is 10 to 40 times greater than it is in the air. CO_2 is actively pumped from the air by the biota to those regions of the soil where it can react with calcium silicate particles. The rate of CO_2 fixation by plants is a strong function of both temperature and light intensity.

The need to have the biota participate in such a system is best illustrated by considering the consequences of its absence. If all life were deleted the soil CO_2 concentration would rapidly fall to below the present atmospheric level and weathering would be substantially reduced in rate. The input of CO_2 to the atmosphere from volcanoes is on average constant and consequently the atmospheric CO_2 concentration would rise until the current rate of weathering was reestablished. The new equilibrium level would probably be above the current levels of the soil, about 1 percent. This is because diffusion from the air is very slow compared with the active penetration of the soil by plant roots. The ambient temperature under these conditions was calculated by Lovelock and Watson to be about 20 degrees Celsius higher than now. The higher temperature might increase the abiological weathering rate but only slightly if it is limited by the rate of diffusion of CO_2 to the calcium silicate rock. Furthermore as recently modelled by Shukla and Minz[7] the lack of land life would so disturb the planetary water vapour transport that large areas would become desert where the weathering rate would be much reduced. It is also significant that CO_2 transport to and from the oceans is very dependent upon the presence of life. The deletion of life from the oceans would lead to a further increase in atmospheric CO_2.

Atmospheric CO_2 abundance and climate is a current environmental concern as a result of the geochemically minor perturbation attributable to fossil fuel combustion. **Figure 6** from Lovelock and Whitfield summarizes in simple diagrammatic form the rise of solar luminosity during the Earth's history and the fall of CO_2 abundance needed to compensate for this rise in heat flux.

The most interesting feature of this diagram is its suggestion that a new perturbation of major magnitude is, on a geological time scale, imminent. If the climate is to stay constant at near the optimum for the biota, then the CO_2 must be further reduced. However, a reduction below 100 ppm could not be suffered by most of the contemporary photosynthesisers. The diagram illustrates that such a level will be reached in only 100 million years. If zero CO_2 were tolerable even this is approached in 200 million years.

It is unlikely that our descendants will be there to witness this interesting period when it comes. The past history of the Earth suggests that a near optimal planetary environment will be sustained by some other means. ■

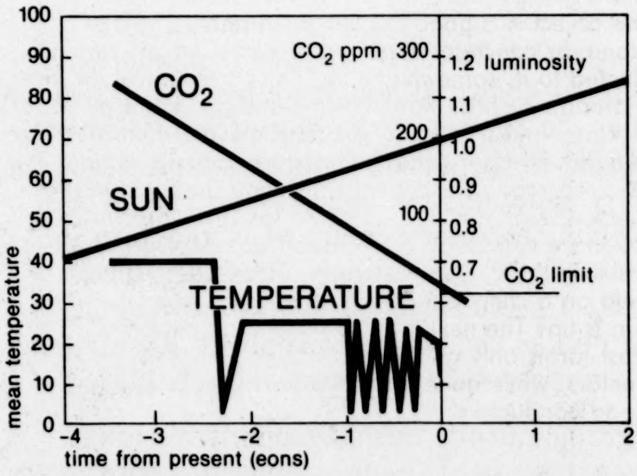


Figure 6. Evolution of the climate showing the variation of solar luminosity, with its present value taken as 1.0. Also illustrated on the same time scale are the proposed decline in carbon dioxide concentration, expressed as the square root of its concentration in ppmv and the approximate range of mean surface temperatures in degrees Celsius.

Footnotes

1. "Atmospheric Homeostasis by and for the Biosphere: The Gaia Hypothesis," J.E. Lovelock and Lynn Margulis, **Tellus**, 26:2, 1973.

2. "Is Nature Really Motherly?" W. Ford Doolittle, Spring '81 **CQ**, p. 58.

3. **The Extended Phenotype**, Richard Dawkins, p. 114, 1982, 320 pp., $22.95 postpaid from W.H. Freeman, 660 Market Street, San Francisco, CA 94104.

4. D.R. Hitchcock and J.E. Lovelock, **Icarus**, 7, 1966, p. 49.

5. I.W. Alvarez, W. Alvarez, F. Asaro, H.V. Mitchell, **Science**, 208, 1980, p. 1095.

6. J.C.J. Walker, P.B. Hays, J.F. Keating, **Journal of Geophysical Research**, 1982.

7. J. Shukla, Y. Minz, **Science**, 215, 1982, p. 1498.

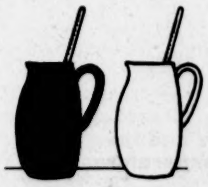
Conceptual Physics

It's easy to understand why so many otherwise educated folks are ignorant of basic physics. For one thing, most books require that you speak Calculus, a skill that many don't have or have forgotten. Worse, most physics books challenge the reader not only to understand the material but to understand the obfuscations of the author as well. I've even seen books that fairtly sneered at the hapless reader! Yet to have no physics while living embedded in an industrial society is to be truly ignorant in a debilitating way. Even if you don't like nukes, The Science Establishment, and all that, there's no point in being blind. What has been needed for a long time is a book that enables a nonmath person to understand the basic physics around them. Friends, that book is here! And it's a good one too. Now you'll know not to tell your kid that the moon phases are caused by the shadow of the Earth . . . (you did know that didn't you?). And you'll even be able to chat intelligently about quanta — for a few minutes anyway. All the phenomena are illustrated, discussed in detail, and hooked into examples available in your daily life. No calculus is used, though some simple algebra helps. It's a textbook, with questions at the end of each chapter so you can see how you're doing. Of course, after studying this book you will not qualify for a graduate fellowship at MIT. But you will have a layperson's knowledge — useful knowledge — of the subject. That's about all one can ask. And it'll make things a whole lot easier if you decide to continue into "real physics" later. An exceptional and welcome book! —J. Baldwin

•

Cooling at Night by Radiation

Bodies that radiate more energy than they receive become cooler. This happens at night when solar radiation is absent. Objects out in the open radiate energy into the night and, because of the absence of warmer bodies, may receive very little in return. They give out more energy than they receive and become cooler. If the object is a good conductor of heat, like metal, stone, or concrete, heat from the ground will be conducted to it, somewhat stabilizing its temperature. But materials such as wood, straw, and grass are poor conductors, and little heat is conducted into them from the ground. These insulating materials radiate without recompensation and *get colder than the air*. On these kinds of materials it is common for frost to form even when the temperature of the air does not go down to freezing. Have you ever seen a frost-covered lawn or field on a chilly but above-freezing morning before the sun is up? The next time you see this, notice that the frost forms only on the grass, straw, or other poor conductors, while none forms on cement, stone, or good conductors.



When the containers are filled with hot (or cold) water, the blackened one cools (or warms) faster.

•

Question: Are there literally atoms that were once a part of Albert Einstein in the brain matter of *all* your classmates?

Answer: Yes, and from Charlie Chaplin, too, although the configurations of these atoms with respect to others are now quite different! The next time you have one of those days when you feel like you'll never amount to any significance, take comfort in the thought that the atoms that now compose you will live forever in the bodies of all the people who will ever be.

Conceptual Physics

(A New Introduction to Your Environment)
Paul G. Hewitt
1981; Fourth Edition; 637 pp.

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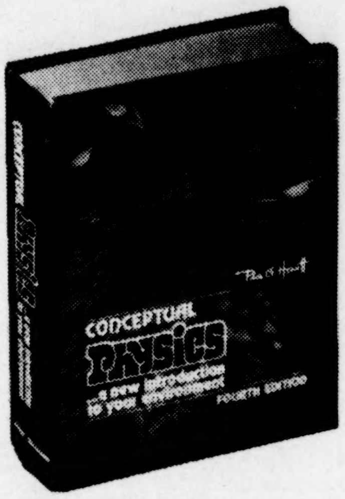

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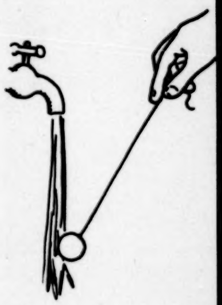
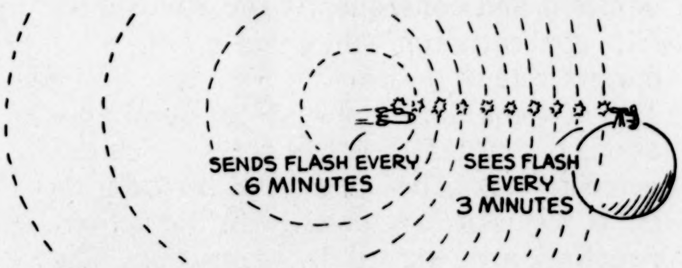
An interesting example of Bernoulli's principle is shown here. Allow a Ping-Pong ball to swing from a string into a stream of running water, and it will remain in the stream even when tugged slightly to the side as shown. This is because the pressure of the stationary atmosphere is greater than the pressure in the moving water. So the ball is *pushed* into the region of reduced pressure by the atmosphere.

The same thing happens to a bathroom shower curtain when the shower water is turned on full blast. The pressure in the shower stall is reduced, and the relatively greater pressure outside pushes the curtain inward. The next time you're taking a shower and the curtain swings in against your legs, think of Daniel Bernoulli!



Pressure is greater in the stationary fluid (air) than in the moving fluid (water stream). The ball is pushed by the atmosphere into the region of reduced pressure.



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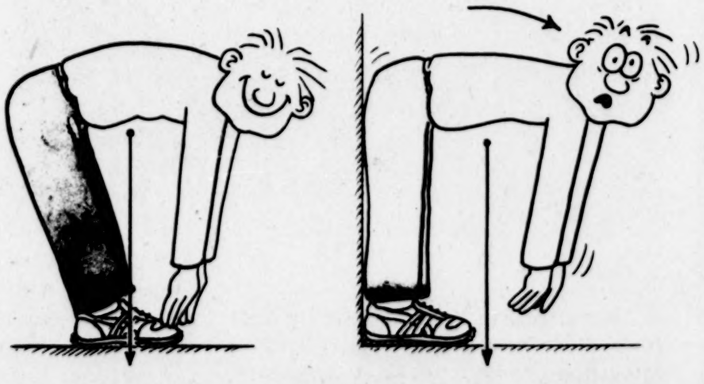
Suppose the rocket ship travels *toward* the receiver while emitting flashes at 6-minute intervals. Although the receiver will still measure the speed of the flashes to be c, he will receive the flashes more frequently. Suppose the rocket ship is traveling fast enough for the frequency of flash reception to be doubled, so the flashes are seen every 3 minutes (Figure 34.9). Then 10 flashes emitted by the approaching ship in 1 hour, ship time, would be received in ½ hour, receiver time.



You can lean over and touch your toes without falling over only if your center of gravity is above the area bounded by your feet.

Women Singing

G
F
D
B♭
A
E♭
E
A♭
B
Last night I dream'd of
I dream'd of thee. Sweet

by Judith W. Monroe

collage by Eva Lake

Judith W. Monroe is a librarian and freelance writer living in Fairfield, Maine. She spends summers on Swans Island off the Maine coast where this heart-felt essay was written.

The collage is by Eva Lake, a San Francisco artist whose posters and publications have graced the local new music scene for the last year or two.
—Jay Kinney

SOME ARE NEVER HEARD. They sing by themselves, lustily, sweetly, joyfully, and sorrowfully. You stop sometimes on the edge, near the woods, at the top of the stairs, around the corner of a street, to catch the next phrase, the line of melody you had just imagined they were about to release, full-throated, ecstatically, but it never comes. Instead, they await another time when you are not nearby.

They are the ones with the sweetest voices. You can see it on their faces. The longing, the poignancy of their lives lies just underneath, not cleverly hidden at all. But you must never ask for a song. Even your expectations might change their sensitive balance. It is difficult enough for them to live among us.

Not long ago three of us traveled to a friend's house in quest of some rope. We knew our friend collected bits and pieces of rope which washed onto the shore. He stored these in his barn. We rode there listening to a tape of Rachmaninoff's Second Piano Concerto. We left the tape playing so that we could hear it after we entered his barn. While we searched with our friend we heard singing. A woman's voice. She had evidently heard the music as she drove by and could not help stopping to sing. One of us left the barn to see whose beautiful soprano voice it was, but she sped away before we could see her.

I walked to the post office today and asked Ethel, our postmistress, if she knew of such a woman, one who might sing to herself. Ethel told me a story. She said there was a woman here who sang while she worked in her home. She was singing one day when another woman walked by her house and heard. The walker was so struck with the beauty of her voice that she approached the house and knocked. The singer came to the door, but she would not sing again although the other woman asked her to do so.

Ethel could not tell me if this was the same woman we had heard, but she gave me her name. I saw this woman sitting in her car by the roadside as I walked back from the post office. As I passed her I asked her if she sang. She answered yes, but averted her eyes as she spoke. When I told her of the singing at my friend's yard she said she was not the one.

Denial is part of it. I could not be sure she was telling me the truth. It is one thing to be caught, to be overheard, and another entirely to admit openly that there are special sounds which arise from your throat, sounds which can make others cry, can demand total attention of a listener, and which are the reasons why you manage to remain alive.

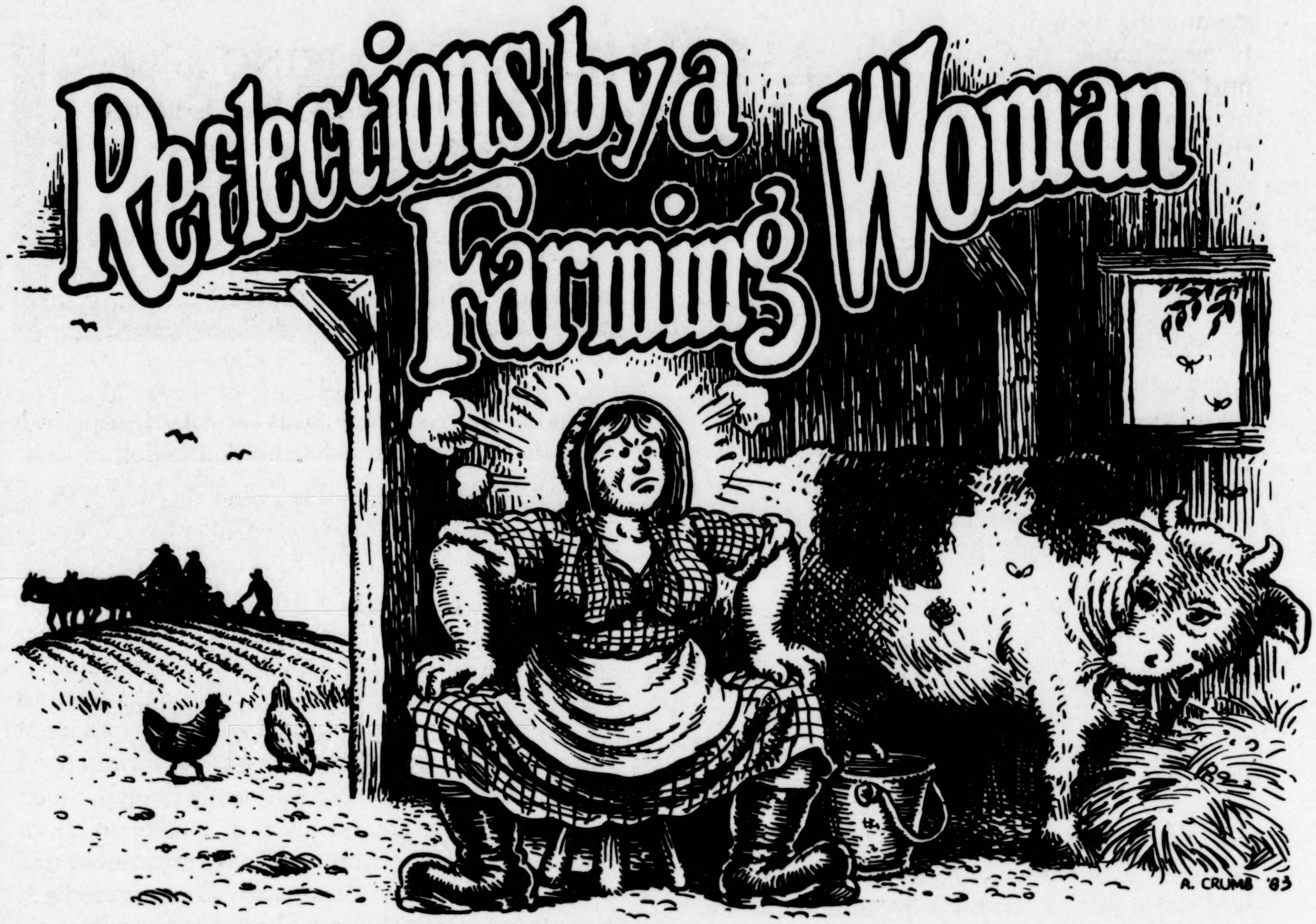
There is another woman in this village who sings. We think she may be the one who was parked in the yard that day. She is not well-loved. People are afraid of her because of her wealth and her ugly dog. They hate her because she is old and has built a fence around her house blocking the view of the sea from other old people who live across the road. No one like her could sing beautifully, it is believed. But that is wrong. She has much sorrow in her life and the songs she sings are her life's blood. She is not intentionally malevolent. She does not think of herself, or the people across the way, as old. She believes that we will all live forever. Only when she sings does she become aware of her mortality, of the wrinkles of her skin and the slower beating of her heart. Actually the rhythm of her heart, the pulsing in her veins pushes the music from her and a song escapes before she knows it is gone. Then she rushes to her fence and forces the huge double doors of the gate back on their hinges. The people on the other side of the road nod their heads as they watch in their windows. They have not heard her sing, but they feel that something of great consequence has happened to make her open the gates. They look out at the sea, greedily, staring at the blue-greens, the grays and the silvers of the waves. They follow the receding tides, the lines and ripples and the swells until their eyes reach the horizon. They can barely find the place where sky meets water. They are trying to capture what is there so they will remember after the gate is closed.

There is a young woman on the other side of the village who sings secretly too. She lives alone, for her husband wanted someone who sings unbidden in public. The young woman has always been afraid to sing for anyone. She does not say what would happen if she did, only that she is terrified. Quite by chance I have heard her singing and I am changed forever. It is awesome to hear an exquisite voice, one of primordial power pouring from a woman you know well. For the moments she is singing I am transported out of my ordinary ways. I feel that I could sing beautifully too, that everything about me will be better now. Her music is the opposite of the woman who realizes the imminence of her death. Hers is a life-giving force, the rhythm one of sensuality. The breaks in her voice are exultant rather than painful. She might be rocking a child, or wooing a lover.

Perhaps it is an imposition to ask her to sing. Yet I am starved for the melody of the one simple song that I have overheard. I beg, and am mortified at my own persistence, and she, like a seal in the water, watches me with limpid black eyes, ready to disappear in an instant.

I try then with the words on my paper to make up for the muteness, the silences which are my lot. It is as foolish as to attempt a painting of a song on canvas. But music dwells within me, and sometimes I wake in the night hearing a voice so sweet that it astonishes me. I strain to hear it better even as I realize that
it is myself. ■

Reflections by a Farming Woman



by Susan Sweitzer Oberst

Illustration by R. Crumb

AS I WASHED UDDERS and eased on milkers this morning, I got to thinking again about women and farming. I like to think when I'm milking; I'm alone with the cows and the pulse of the vacuum pump on the milkers, and between cows there's time that is all mine to reflect, mull over, consider, plan. Hal came in early to feed the new calves with the colostrum we save from the first milkings after a cow freshens. He was early doing the chores so we talked a little. Turned out everyone was headed out to the oat field to drill alfalfa and cultipack with the teams. Four people doing what two ought to. It bothered me. There were tomatoes to can and beans to freeze, the lawn needed mowing and there was laundry to be done, weeds to be chopped in the garden and winter vegetables to be started in the greenhouse. Why did everyone have to go out to be with the teams when all this other work was badly in need of doing? It caused me to check, quickly, as I have innumerable times in my life, the distribution of labor. I came, as often before, to the age-old questions: is it less fun because it is women's work or is it women's work because it's not as meaningful or dramatic? Or am I really exaggerating the issue? The men here sometimes do can vegetables and mow the lawn. There was all that sweet corn they froze last Sunday.

It all got me thinking about our valuing one job over another and about the community meeting (we have one every Tuesday after supper) in which I realized in a flash of recognition that Mae and I were asking to be taught the farming jobs, mowing, using tractors, driving teams, combining, baling, spreading manure. But George and Hal weren't asking to be included more in making cheese, housework, laundry, spending days with Andrew or canning and freezing. They were willing to do their part, don't get me wrong, but they weren't approaching it as being potentially personally rewarding or enjoyable. That is the point of impasse for me, the point where my thinking deteriorates. I decided in between milking Bertha and washing off Annie's udder that

The real gender frontier today isn't in cities, it's on farms, because men and women still have to decide how to divide the work. Here is a preliminary report, cogent in its confusion, written by a CQ *subscriber who told us nothing about herself, not even the publication this first appeared in. We only know she lives on a communal farm in western Kentucky.* —*Art Kleiner* vacuuming the house is actually as valuable, as rewarding, and as important as scraping manure off the cow lot with the tractor. Making cheese rates close to using the team of horses. The analogies could go on. Historically the divisions have not always been the same, but the women's work has been devalued, only taking on social significance as that work becomes traditionally men's work. There I was, thinking before breakfast about women's work versus "the important stuff," and all the misunderstandings and confusion and resentment those categories have perpetrated through the decades.

MAE AND I WERE ASKING to be taught the farming jobs, but George and Hal weren't asking to be included in making cheese, housework, laundry, or canning and freezing.

As I took the reins to the team pulling the seed drill later in the morning, I recalled the issue. George was advising and correcting me: "Belle's over too far, hold 'em in a little, you're turning too sharp, back a little." I drove on alone after a while, carefully following my wheel tracks from previous rows. I was calmed and reassured, and reminded that I have been a very good driver of horses for years now. There have been times I controlled them much better than George did, and times he handled them best. But I knew I was competent, knowledgeable, skilled, capable. I relaxed into the job, the dry dirt beneath, the team slow and steady ahead and deep blue sky rimmed with billowing white clouds. Thoughts came to me again: How was it for me being a woman and a farmer? Turning it over in my mind, slowly I was coming to think there was something in the process of learning and teaching that was basic to my farming, to my struggle to be a farmer and a woman, a mother, a wife and an equal.

The team of horses and I finished drilling the seed into the last of the field, but there was seed left over. The drill hadn't been set quite perfectly to sow every bit of seed as it should have and we decided to use the Cyclone Seeder to broadcast the seed across the field. I was hesitant to do it myself, fearing a mistake, a miscalculation, missing some unknown, important detail. Although it was my day to work on the farm and George's to play with Drew, I suggested tentatively that George do the broadcasting. He checked my reasons and assured me that he knew no more about it than I did. Now I have always been very imaginative and ingenious about figuring out gadgets and tools and I reminded myself of that.

Although it was deceptively casual, this was a crucial moment in our journey toward fuller lives. It would have been easiest for me to do what I know best, being a mother, playing with Andrew. It's not physically as demanding, there are fewer chances for immediate mistakes. George would find broadcasting seed easy, soothing, rewarding. Although he claims not to know much about it, I am acutely aware of the real depth of his knowledge about farming and sowing seed. He has read and seeded much, much more than I. We are, however, in agreement about this. We will each push ourselves to experience and attempt challenges. Being with Drew underlines aspects of George that are blurred in the rest of his life. It is a chance for him to be gentle, patient, silly, cuddly, nurturing. Sowing seed is a chance for me to work unaccustomed muscles, to feel the satisfaction of a job completed skillfully, a chance to discover my ability to succeed in spite of my doubts or fears.

Broadcasting seed is one of those rare, delightful jobs in which your body is part of the process. Three things determine the amount of seed sown: the width of the slot through which the seed falls, the speed at which you walk, and how fast you turn the crank. It was good to walk steadily, cranking out the seed, covering every clod of earth in that field myself. It came to me again that it is in the learning and teaching, the taking chances and being patient that much progress is measured. In my life men can be tremendous allies if they will patiently and respectfully share with me the knowledge that they have acquired themselves, and if they will see me as an equal when we are both learning. Teaching impatiently is humiliating for the learner; learning defiantly is less than optimal. When I am taught to mow hay, I want the whole theory: how to turn corners, how to replace broken sections and guards, how many outside rounds to make and why, how fast to drive, when to use the brake and when to use the clutch; all the information Hal or George use. I want it taught with much patience, and no condescension.

IS IT LESS FUN because it's women's work or is it women's work because it's not as meaningful or dramatic?

AS MUCH AS WOMEN STRUGGLE to learn the art of being a teacher of men, men may grasp awkwardly for the skills to ask, the skills to be learners.

However, I am asking more than that from these friends. What I ask will not be unfamiliar to most women, although we all ask in our own ways. We have much to offer, so ask us to teach you. It is good to know we have skills and knowledge which are sought after. There is much I have ahead of me to learn: spreading manure, judging when hay is ready, pulling a calf, making silage, running the combine. As a woman I have a great deal to teach: gardening, driving horses, mothering children who believe in their own worth and intelligence, canning, freezing, making cheese, organizing. Neither list could ever be complete.

Women are seldom seen as experts or decision makers in farming. Even with tremendous support, respect, and encouragement from the men we live with, we still deal with the often gently disqualifying attitudes of the vet, the milktruck driver, the artificial breeder man, the feed company, the neighbors, and even each other. And we generally deal with it very well. The role of the expert is often initially difficult for women to assume. We could profit greatly from encouragement. I was raised in a Quaker family and community where, before God and in business meetings, every person was respected equally. But the socialization process is a powerful one in our society, and women have seldom felt they had anything worth sharing. This is an age-old feeling, handed from mother to daughter, in spite of the fact that it is totally untrue. Writing this now is, in some ways, an act of defiance undertaken after hours of grappling with the feeling that I had nothing to say, that what I could say wouldn't be heard or appreciated by anyone else, or that I would feel incredibly vulnerable in sharing my real thinking. It is increasingly clear to me that those are feelings and not facts, feelings created by years of exposure to fairly well-meaning, subtle oppression.

As much as women often struggle to learn the art of being teachers of men, men may grasp awkwardly for the skills to ask, the skills to be learners. We must encourage each other in our efforts to break through lifetimes of experiencing relations between men and women as they have been.

I do not think that growth is simple or easy, but I know that it is rewarding. Sowing seed, writing this article, both have stretched me and enriched me. I am fortunate to be farming with men who are stretching their own lives and encouraging me as I push us all to greater challenges. Today the seeds are in the ground, germination has begun, and I am sure that in both teaching and learning we can provide fertile ground for growth, fed by deepening trust and delight in each other. ■

WOMEN OF THE WEST

These are books describing the traditional role of women at a time and place where it worked: on the frontier. Their power, exercised within the family, kept that unit healthy enough to become the building block of new communities.

We tend to view women's role in the family in twentieth century terms, as the passive homemaker rather than the ruggedly feminine community builder who nurtured children, animals, crops, and men. In partnership with men, they started schools, churches, businesses, and farms. It is understandable that some in western towns became mayors, even one a state governor, and that the suffragette movement grew out of the reality of women's strength in their communities.

The family is no longer sufficient to provide a meaningful life for many women. But like pioneer women, we are entering the unknown, as it becomes clearer every day that there is no turning back. The joy, adventure, and spiritual awakening they found in their frontier is encouraging to read as we enter ours.

—Rosemary Menninger

A Lady's Life in the Rocky Mountains

What a woman! Isabella Bird came to Colorado to climb Pike's Peak and spent the winter as surrogate mother to a bunch of mountain men in a hunting lodge while developing a deep relationship with a notorious outlaw who lived nearby. They climb Pike's Peak together in a blizzard, and the reader grows to love him as she must have. If all of this sounds hokey, it's not; she'd ride 60 miles on horseback through snowstorms as a matter of course, and she wore one dress all winter. After her adventures, she returned to England, where she later married and worked with a leading botanist.

—Rosemary Menninger

A Lady's Life
in the Rocky
Mountains
Isabella Bird
1969; 245 pp.
$4.95
postpaid from:
University of
Oklahoma Press
1005 Asp Avenue
Norman, OK 73019

or Whole Earth
Bookstore

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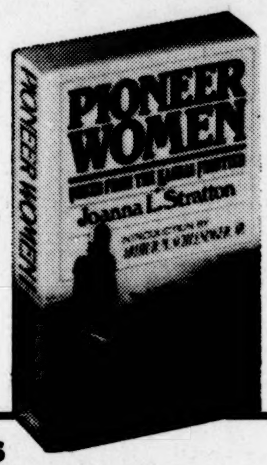
The host and hostess of one of these wagons invited me to join their mid-day meal, I providing tea (which

Pioneer Women

Alone in a cabin with a pack of wolves clawing at the door, impromptu picnics with neighbors, the work of growing a crop on virgin ground, the establishment of local governments, schools, and churches: These were the concerns of the Kansas women whose recollections were gathered by the author's great-grandmother and discovered recently in an attic. These many women have in common a straightforward way of telling their stories which seems to fit the sparseness of their environment and the charm they found in it. —Rosemary Menninger

Pioneer Women
Joanna Stratton
1982; 320 pp.
$9.95
postpaid from:
Simon and Schuster
Attn.: Mail Order
1230 Avenue of
the Americas
New York, NY 10020
or Whole Earth
Bookstore



A pioneer family poses with the covered wagon that brought them safely to Johnson County, Kansas.

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That loneliness, usually borne with dignity and silence, could at times express itself in unexpected ways. Mary Furguson Darrah recalled a time when "Mr. Hilton, a pioneer, told his wife that he was going to Little River for wood. She asked to go with him . . . She hadn't seen a tree for two years, and when they arrived at Little River she put her arms around a tree and hugged it until she was hysterical."

Women's Diaries of the Westward Journey

Accounts of migration: of women separated from loved ones forever by a broken axle that forced a wagon train to abandon part of a family and move on; of a girl kidnapped and raised by Indians; of babies born and husbands killed. All strung together by a historian whose insights are as interesting as her subjects' reports.
—Rosemary Menninger
[Suggested by Kathy Kindscher-Waters]

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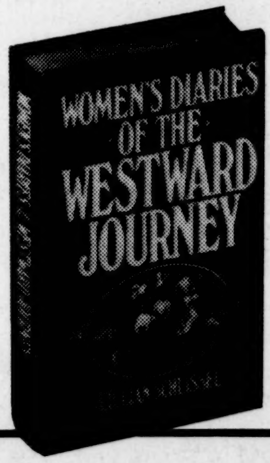
Precisely because work roles were blurred on the frontier, and because women were often called upon to do chores recognized as men's work, dress became a primary mode of asserting the delineation of the sexes. Dress was emblematic of the intention of women to restore the domestic sphere as soon as possible thereby limiting women's work to the house. Starching white aprons on the frontier must have required extraordinary discipline, but those starched aprons betokened delimited work roles that frontier women would not lightly forego.

Women's Diaries of the Westward Journey
Lillian Schlissel
1982; 262 pp.
$17.95
postpaid from:
Schocken Books
200 Madison Avenue
New York, NY 10016
or Whole Earth
Bookstore



Women in Navajo Society

A compelling book. Navajo religion is based on healing, bringing into balance what is out of balance. Navajo women learn to help their family members stay in balance and thereby assume the role of spiritual guidance counselors within the family. A few have also given guidance to the Navajo people as a whole. One was Raggedy Lady, the author's great-grandmother, whose biography is included in this book. The rituals and lifestyles of traditional and modern Navajo women are also described. —Rosemary Menninger

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During the ceremony the young Navaho girl becomes the center of attention in the life and action of one or more Navajo families. A new life begins in that the girl leaves childhood and becomes a Navajo woman. The mother of the girl having the puberty ceremony realizes that she never by herself could carry out the ceremony and that it is only through the help of other women in the community and clan that such a ceremony can be possible and successful. Navajo women help each other because each knows that when the situation is reversed later the person who received such help will return it. This interweaving or interaction makes Navajo women strong, and it makes Navajo society possible.

Women in Navajo Society
Ruth Roessel
1981; 180 pp.
$15 (shipped with
handling invoice) from:
Navajo Curriculum
Center
Star Route One
Rough Rock, AZ 86503

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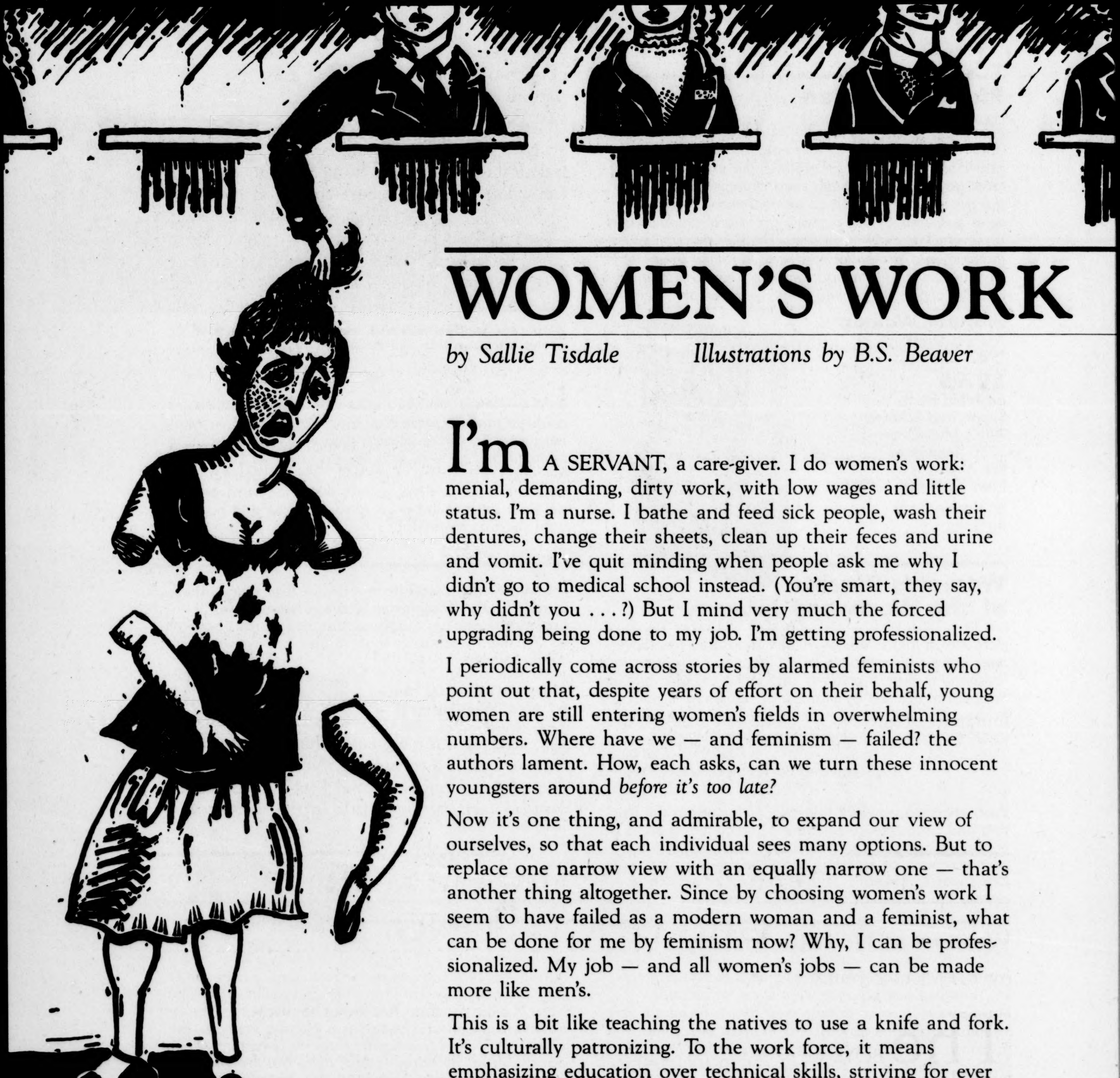
they had not tasted for four weeks) and they hominy. They have been three months on the journey from Illinois, and their oxen were so lean and weak that they expected to be another month in reaching Wet Mountain Valley. They had buried a child *en route*, had lost several oxen, and were rather out of heart. Owing to their long isolation and the monotony of the march they had lost count of events, and seemed like people of another planet. They wanted me to join them, but their rate of travel was too slow, so we parted with mutual expressions of good will, and as their white tilt went "hull down" in the distance on the lonely prairie sea, I felt sadder than I often feel on taking leave of old acquaintances. That night they must have been nearly frozen, camping out in the deep snow in the fierce wind.



WOMEN'S WORK

by Sallie Tisdale *Illustrations by B.S. Beaver*

I'm A SERVANT, a care-giver. I do women's work: menial, demanding, dirty work, with low wages and little status. I'm a nurse. I bathe and feed sick people, wash their dentures, change their sheets, clean up their feces and urine and vomit. I've quit minding when people ask me why I didn't go to medical school instead. (You're smart, they say, why didn't you . . . ?) But I mind very much the forced upgrading being done to my job. I'm getting professionalized.

I periodically come across stories by alarmed feminists who point out that, despite years of effort on their behalf, young women are still entering women's fields in overwhelming numbers. Where have we — and feminism — failed? the authors lament. How, each asks, can we turn these innocent youngsters around *before it's too late?*

Now it's one thing, and admirable, to expand our view of ourselves, so that each individual sees many options. But to replace one narrow view with an equally narrow one — that's another thing altogether. Since by choosing women's work I seem to have failed as a modern woman and a feminist, what can be done for me by feminism now? Why, I can be professionalized. My job — and all women's jobs — can be made more like men's.

This is a bit like teaching the natives to use a knife and fork. It's culturally patronizing. To the work force, it means emphasizing education over technical skills, striving for ever higher wages and social status. (At a forum I attended some months ago, a speaker with her doctorate in nursing simply said, "Doctors and social workers have had it for years. Now we want ours, too!") Essential to being a professional is that famous distance — call it objectivity. This is much encouraged by the use of titles, especially if the title applies only to the professional and not to the client. Also essential is that there be people who are *not* professionals. The value of wages and social status is completely dependent on the comparisons available in a hierarchy.

Nurses are being forced to get bachelor's degrees and advised to leave the bedside and become supervisors, researchers, and (of course) professors. All that bedpan-carrying and denture-washing can be left to other women, without college degrees, who are usually older and belong to minorities.

Sallie Tisdale is a nursing student in Portland, Oregon. She is also a freelance writer and mother of a five-year-old boy.

LaVerne Bennett, who wrote "The Party Basement: Girlhood Song" on the following page, is a freelance writer living in Park Forest, Illinois. —Jay Kinney

That, too, is of a pattern. The result of all this uplifting missionary work has been to incorporate into women's fields — and women — the worst characteristics of male-dominated jobs: ambition, competition, elitism, a priority on titles and money, and a contempt for hands-on labor.

I see all too clearly the injured pride that has led to this. It's so very easy to get defensive. Physicians, that exemplary group of professionals, not only ignore but tend to devalue my work. Their arrogance and disrespect make me want to prove something to them. I want to show them I'm as "good" as they are, as smart and quick and technically competent. I'd like to show them up if possible, catch them out. That's a hook, and a sharp and nasty one at that. To beat someone at their own game, you have to play.

We should value women's work — whether done by women or men — for precisely the reasons society has denigrated it: *because* it is menial, demanding, dirty. I want to honor the act itself, give the work meaning and grace quite apart from any meaning which society may or may not bestow. Rather than proving I deserve respect, I want to go beyond it and not seek respect at all.

Imitation is, after all, the sincerest form of flattery. I am a little amazed that after all this time, mainstream feminism has gone no further than cribbing on the test notes. For the most part feminists have failed to see the enormous opportunities in our historical and natural differences.

Must we still talk in terms of power? Well, alright. What power, what revolution in learning to meet every human on an equal level! The Quakers believe that God lives in each of us, a bright light deep inside. Every day I become familiar with strangers, taking them to my breast much as wet-nurses used to do with strangers' babies. I am challenged to find the light of God. It is a mystery. I have discovered, at unbidden moments, a well of naive love in myself, what Christians call agape. Love is hard, this is the skill I practice.

This act of exchange between people requires humility, and intimacy, and a personal respect. What if my patients respected my position, my authority, instead? What if they called me by a title rather than my given name? Then, I suppose, I would really be a professional. Distanced, slightly alienated, I could at least claim that.

There are other lessons. I see what it means to grow old. I see what it will be like for *me* to grow old, for my lover to grow old. I see that what binds us one to the other has little to do with the body. I know how love can illuminate a person. I am no longer afraid of death. I see that we are all, each one equally to the other, animated by a force greater than ourselves, and that we can rise to meet it. Now this, these lessons, I call power — and I would not trade them for any salary or title in the world. ■

THE PARTY BASEMENT: GIRLHOOD SONG

by LaVerne Bennett

The BOYS would storm the creaky, worn door, loosening more peeling gray paint. Hurriedly, we girls would gather to retreat deeper into the musty, alcohol-state protection of that dank cavern, our private sanctuary. Rarely did we offer our wine-cellar-like tomb to them. Our girlhood womb.

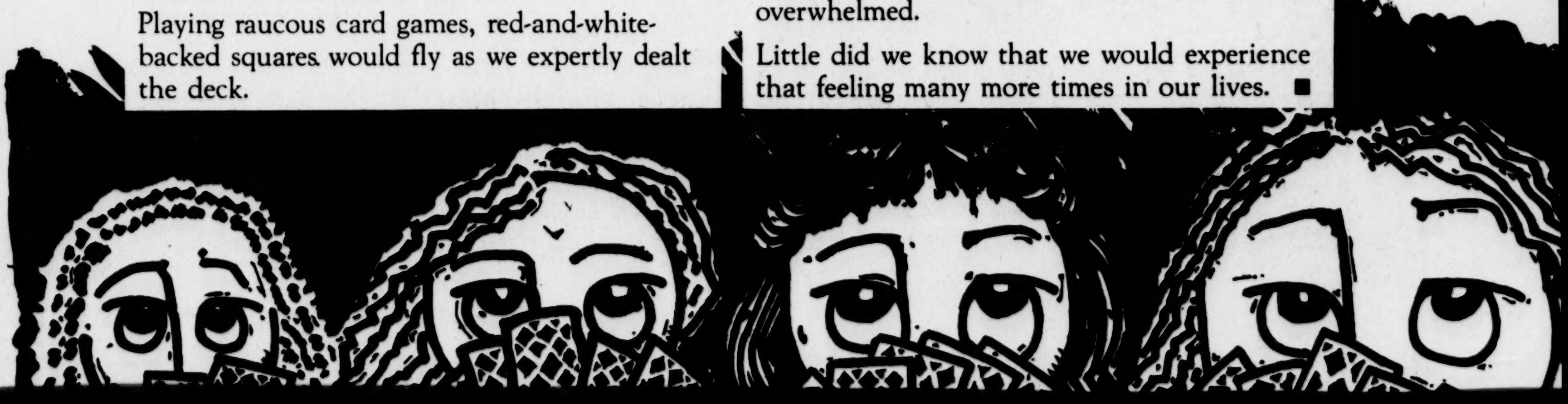
Munching pilfered maraschino cherries, we gazed at our reflections in the distorted, film-streaked mirror behind the bar.

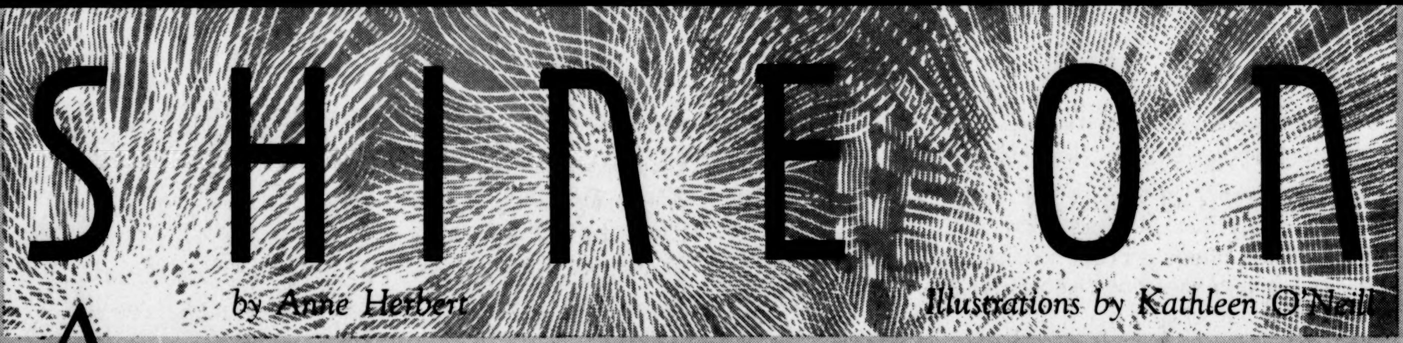
Playing raucous card games, red-and-white-backed squares would fly as we expertly dealt the deck.

Sitting silently together at other times, someone would jump up to play the juke box, a somber, massive hulk of carnival red, yellow, and dancing lights. We danced to the tinny, scratchy sounds. Our sweat mixed with city dirt, producing an earthy mustiness that filled our heads and made them ache.

Once, we did let the boys in; their gaudy shouts seemed to cramp our space as they pushed and roughhoused among themselves. They dominated. We lost control of our turf. They soon left. We stood quietly. We were overwhelmed.

Little did we know that we would experience that feeling many more times in our lives. ■



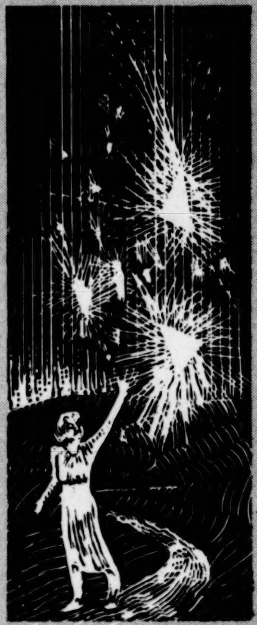


SHINE ON

by Anne Herbert

Illustrations by Kathleen O'Neill

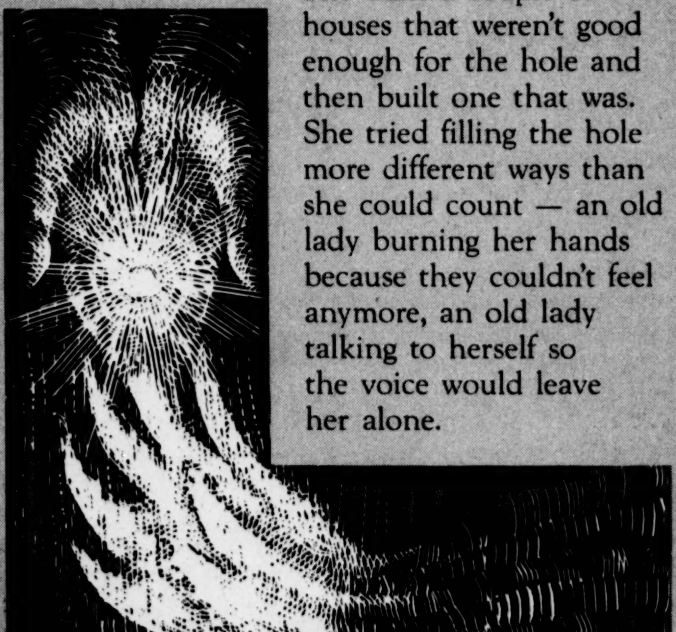
AMANDA had a story in her head that kept coming into her head. In it, she lived her whole life in a country with no sun. Light but no sun. No sun, no color. Not much weather. Everything was lukewarm rumpled and grey. In that country she built a stained glass window.



She started seeing little flecks of color in rocks and dirt when she was small. She saved them with no words for what they were. She got better and better at seeing them and did people think she was crazy? Yes.

She took her bits and glints and moved to a hill with no people. She played with fire and melted some things and burned others (including her hands — glow of color in the scabs). What the fire left sometimes had more of what her eyes itched for. She seared her gleams again and again until the colors were bright and her hands solid scar.

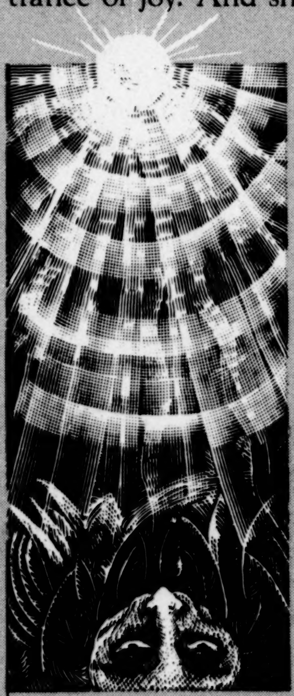
A hole with gleams stretched across it kept waking her up. "Make me real." She tried, but something was wrong. Two years, three years. A *standing up* hole made of gleams. Oh. Need to build a house for that standing up hole. "And I'll fill it," a voice said.



She built a couple of houses that weren't good enough for the hole and then built one that was. She tried filling the hole more different ways than she could count — an old lady burning her hands because they couldn't feel anymore, an old lady talking to herself so the voice would leave her alone.

She finally got the right gleams stretched across the hole in the right way. Not the ones she had dreamed but better. (The voice had left her head and taken her hands.) She went to sleep in front of the done window. She woke up because. Because because because "the sun was rising." The sun was rising and she had no words to shield herself.

The hole was full and the house was full of a thousand times the most she'd ever dreamed. A vast emptiness inside her that she had not known was there was filled, and she was in a trance of joy. And she woke up because.



Because because because a man was running past the house screaming. And then a woman screaming, and more people, fighting and tearing at each other, where people had not been in years. They had not suspected the sun. They were taking it crazy and blind. They were roaring out of town mad, searching for the grey.

This was the part of the story where Amanda started to cry. Should she have tried to explain — to prepare the people who had jeered her out of town? Prepare them for what she'd not expected? Should she feel bad — she couldn't help feeling bad as the people quieted into lunacy or death — just as she couldn't help glorying like a swimmer, like a lover in the hundred, million colors all around her, undiminished by formal classification. Amanda in the story was ecstatic, guilty and confused and Amanda listening to the story in her head said to me, who made her tell me the story, "Love what you desire. Only love is worth the danger of desire. If anything is."

If it can be said of anyone it can certainly be said of Anne Herbert that she needs no introduction to regular **CQ** *readers. Still hard at work on her* **Rising Sun** *book for Random House, she last appeared in these pages with "Honest Hope" in the Fall '82* **CQ**.

—Jay Kinney

The American Medical Association Family Medical Guide

Every home needs a basic medical reference book and this guide is a very good choice for those who want solid information and quick answers. Personally, I never thought I would endorse a book with an AMA imprimatur (too conservative, believe only physicians can be healers), but I changed my mind when I read the section entitled "Symptoms and Self Diagnosis." These 188 pages of clearly written and illustrated flow charts indicating when to apply home treatment or when to seek medical advice are alone worth the price of the book. An additional 18 pages of photographs (some quite graphic) of dermatologic conditions are an excellent visual aid to diagnosis.

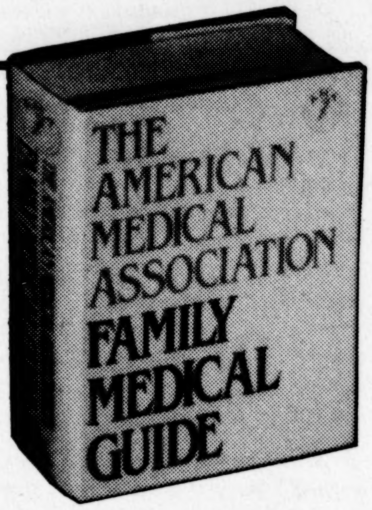
The bulk of the book is devoted to body systems and their disorders. Although most subjects are covered in one page or less, there is adequate information to understand the causes, symptoms, and options for treatment of over 650 diseases. The 1300 drawings, photographs, and diagrams are also of great help. The last part of this guide discusses the American health-care system, with compact but useful sections on home health care and the administration of first aid.

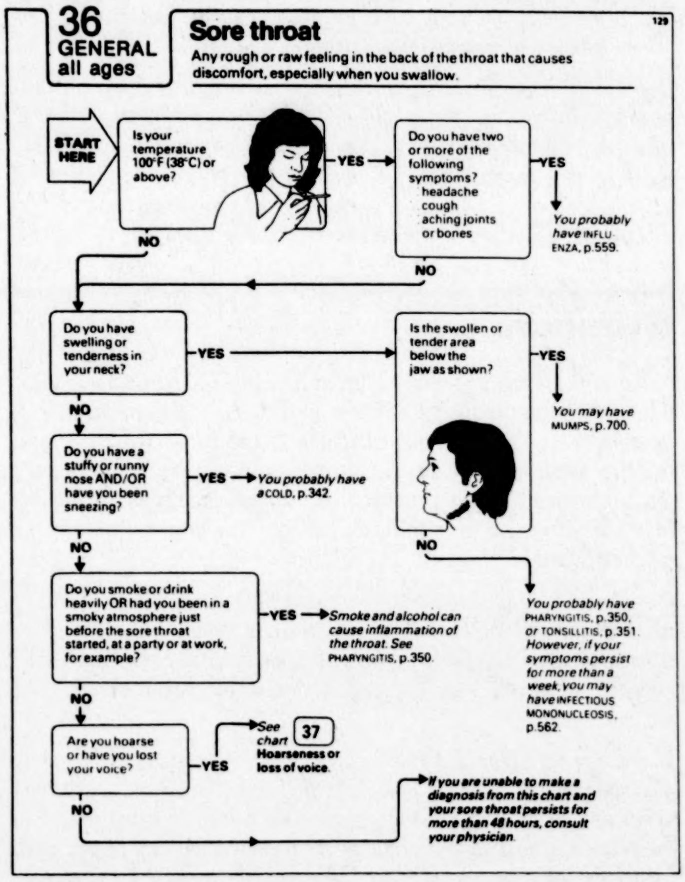
A caveat: this is not the book for those readers who are primarily interested in holistic health or alternative therapies — a cursory two pages are given to these topics. However, if what you want is reliable medical knowledge and advice, then I recommend this book.

—Rochelle Perrine Schmalz
Planetree Health Resource Center

Outstanding book. If there's a one-stop shop for everything you need to know for intelligent home health practice, this is it. *—Stewart Brand*

The American Medical Association Family Medical Guide
Jeffrey R.M. Kunz, M.D., Editor
1982; 831 pp.
$30.95
postpaid from:
Random House
400 Hahn Road
Westminster, MD 21157
or Whole Earth Bookstore





36
GENERAL
all ages

Sore throat

Any rough or raw feeling in the back of the throat that causes discomfort, especially when you swallow.

129

START HERE

Is your temperature 100°F (38°C) or above?

YES → Do you have two or more of the following symptoms?
headache
cough
aching joints or bones

YES → *You probably have* INFLUENZA, p.559.

NO

Do you have swelling or tenderness in your neck?

YES → Is the swollen or tender area below the jaw as shown?

YES → *You may have* MUMPS, p.700.

NO → *You probably have* PHARYNGITIS, p.350, *or* TONSILLITIS, p.351. *However, if your symptoms persist for more than a week, you may have* INFECTIOUS MONONUCLEOSIS, p.562.

NO

Do you have a stuffy or runny nose AND/OR have you been sneezing?

YES → *You probably have a* COLD, p.342.

NO

Do you smoke or drink heavily OR had you been in a smoky atmosphere just before the sore throat started, at a party or at work, for example?

YES → *Smoke and alcohol can cause inflammation of the throat. See* PHARYNGITIS, p.350.

NO

Are you hoarse or have you lost your voice?

YES → *See chart* 37 **Hoarseness or loss of voice.**

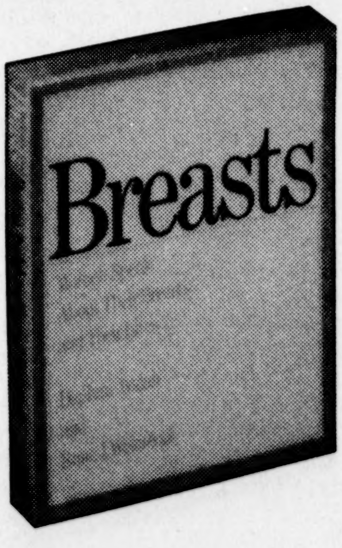
NO → ***If you are unable to make a diagnosis from this chart and your sore throat persists for more than 48 hours, consult your physician.***

Breasts

This book began as a collection of stark, black-and-white, waist-to-shoulders photographs of breasts of all shapes and sizes and ages. But the comments that the women being photographed made turned out to be so revealing that the authors began to collect them. Those narrative self-portraits make up the bulk of the book. They are supplemented by essays, excerpts, clippings, and commentary. Since breasts define so much of what a woman is in our society, the shared experiences in **Breasts** *are eye-opening for a man to read; for a woman (especially one just growing up) the words and graphic exhibits of diversity are an education, a gift of self-confidence, self-acceptance, reassurance from older sisters. The sections on pregnancy, breast-feeding, and mastectomy are all well-done.*

—Mark Zimmermann and Paulette Dickerson

Breasts
(Women Speak About Their Breasts and Their Lives)
Daphna Ayalah and Isaac J. Weinstock
1979; 286 pp.
$10.95
postpaid from:
Summit Books
Attn: Order Dept.
1230 Avenue of the Americas
New York, NY 10020



•

I heard that a group of women were breast-feeding their children in a park in Florida and they were threatened with arrest. The people there didn't think it was *decent!* But the police can't legally stop you from public breast-feeding. When I was an instructor for the La Leche League, prospective breast-feeding mothers would always ask questions about that — it was a real concern. Imagine if they could actually arrest you for indecent exposure? The poor kid's hungry and you have to go someplace where you can't be seen before feeding him. God, it's *bizarre!*

•

I think in a certain way my breasts probably *saved* my ass! Really! For all the self-consciousness that went along with adolescence, and for all the disappointment and inadequacy that I felt then, I think my breasts quite literally saved my life.

I recently attended the twenty-five-year reunion of my high-school graduating class. I saw what happened to those girls who *had* beautiful breasts. I know what became of their lives. . .and what their breasts and the *emphasis* placed on their breasts did to them. It made them small-minded, small-town housewives for a lifetime! If I had been a 34B, I'd probably be where they are now. It's peculiar — all the high-school cheerleaders, all the really busty girls. . .it was like a sentence to prison! That's what it *really* was! At sixteen I couldn't see it. . . .I can see it now.

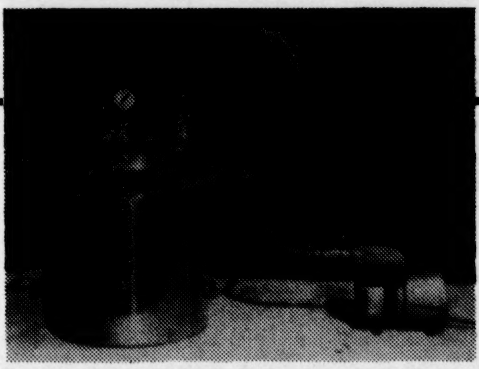
Preserving Perishables with Vacuum Packing

Here's an excellent little book that serves two purposes. First it introduces the reader to small-scale vacuum packing, describes how the process works and gives its benefits and limitations. Then comes the bonus second part — a thorough explanation of how to make your own vacuum packing device with not much more than a small vacuum pump to do the work and a slightly modified (by you) pressure cooker for the chamber.

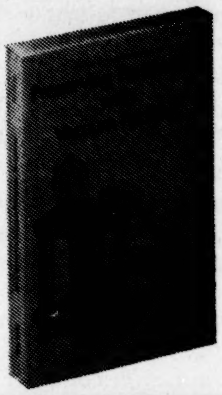
If you don't own either of these devices, the pump plus a big 21-quart cooker plus fittings will set you back about $250, in exchange for which you'll be able to vacuum pack in your own kitchen, as well as own a first-class pressure cooker for canning chores.

I've seen one of these outfits operating and it really works, no fuss or muss, just a little pump humming for the two minutes it takes to evacuate air and then voila! you've got jars or bags full of whatever, ready to stash away for years. Anyone seriously into storing food or other perishables will benefit from this book.

—Dick Fugett



Completed assembly ready for use. Note: Wing nuts on Pressure Canner do not have to be used since vacuum will pull the lid tight.



Preserving Perishables with Vacuum Packing
Myron Ort
1981; 128 pp.

$8.95
postpaid from:
Orion Enterprises
P.O. Box 7073
Cotati, CA 94928
or Whole Earth Bookstore

Gamines

"Millions of abandoned children, called **gamines** *in Columbia, struggle to survive in 24 Latin American countries. . . .We do not propose adoption as a panacea for the problems of child abandonment in Latin America. But until nations and individuals begin to care about the less fortunate, poor children will go hungry, homeless and ragged."*

Gamines *is a guidebook for adopting such children. It is also an excellent resource for people contemplating adoption per se, with a thought-provoking review of varied "motives" for adoption and their prospects for success.*

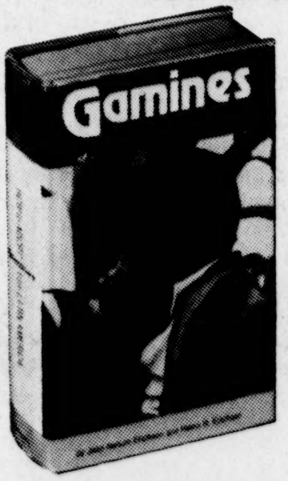
The Erichsens record their own and other parents' experiences adopting children in Latin America with the intention of sparing future adoptive parents the errors they committed in ignorance. The personal accounts are by turns moving, appalling, aggravating — and always informative. Two-thirds of the book is devoted to the practical, bureaucratic details of accomplishing an adoption from Latin America, including U.S. laws and procedures. Most valuable is a 60-page compendium of geographic, social, cultural, economic, and political information; adoption laws; private and government adoption agencies; and courts of jurisdiction and their addresses. The compendium covers each of the countries of Central and South America, the West Indies, and Mexico.

The book also discusses the social ramifications of trans-racial adoptions, personal experiences coping with racial prejudice, and the enrichment of adoptive families' lives through the cultural backgrounds of their children.

—Carol Van Strum

Gamines
(How to Adopt from Latin America)
Jean Nelson-Erichsen and Heino R. Erichsen
1981; 352 pp.

$16.85
postpaid from:
Dillon Press
500 South Third Street
Minneapolis, MN 55415



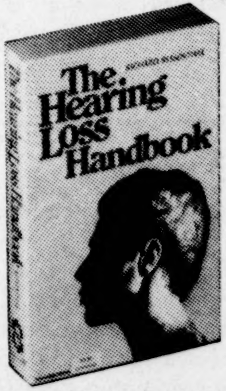
The Hearing Loss Handbook

I know of no finer work written for the layman who is dealing with a hearing problem. The topics the ***Handbook*** *covers include the anatomy and physiology of the ear, the nature of hearing loss, technological aids, lip reading, auditory training, and sign language — that last, by the way, is as useful an aid as any of the others.*

—Mitchel Turbin

The Hearing Loss Handbook
Richard Rosenthal
1978; 231 pp.

$4.95
postpaid from:
Schocken Books
200 Madison Avenue
New York, NY 10016



•

There are clues that often point to a hearing loss. Here are some:

1. Do you avoid noise more than most people you know?
2. Do you find yourself watching people's lips when they talk?
3. Do you go out less than you used to — to the theater, movies, social gatherings, etc.?
4. Are you ever accused, perhaps teasingly, of hearing only what you want to hear?
5. Do people often complain that you aren't listening?
6. Do you avoid people who have soft voices, high-pitched voices, or unclear speech?
7. Do you often ask people to repeat their last names when you meet them, or the names of places unknown to you?
8. Do you carefully position yourself so you can hear as much as possible at a business meeting, a lunch or dinner party?
9. Do you seize the conversation more than you used to? Do you find yourself talking a lot more, changing the subject abruptly, or cutting in to what others are saying?
10. Do you usually hear men much better than you hear women?
11. Do you think your speech has deteriorated, that you might be slurring, mispronouncing, mumbling, shouting, or speaking in a monotone?

The Aerobics Program for Total Well-Being

Kenneth Cooper was the George Washington of the current fitness movement. ***The Aerobics Program for Total Well-Being*** *updates his guidelines for beginning and monitoring an exercise program. It is still the best available aerobic exercise system.*

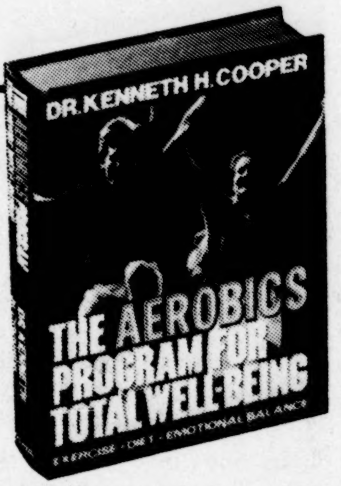
I've always felt that Cooper was an engineer at heart. His book is chock-a-block with charts and tables. But don't be put off — the charts and tables are easy to make sense of and soon become vital.

Cooper's system of aerobic points is actually a kind of biofeedback machine that allows you to calculate the aerobic benefit of virtually ***any*** *physical activity. This means that you're not limited to running or swimming or bicycling or any other single type of exercise. There are tables that will convert your aerobic dancing, trampoline jumping, walking, stair climbing, badminton, rope skipping, hockey, handball, or cross-country skiing — or a dozen other activities — into aerobics points.*

Cooper has improved his system a good deal since I began an exercise program using his guidelines more than 12 years ago. Back then he had you measure your initial fitness level by going to a track and running as far as you could in 12 minutes. He now starts things much, much more gently. If you opt for the walking/jogging program, for instance, you begin by strolling two miles per day three times per week. Much more attention is paid to warming up and cooling down, and you are taught to calculate your target heart rate and then to take your pulse to be sure that you are pacing yourself correctly.

I started keeping an exercise log and calculating my aerobics points back then and have been exercising regularly ever since. I still keep the log, but haven't calculated my aerobics points in years. Looking up my last week's exercise on Cooper's tables I find the following:

The Aerobics Program for Total Well-Being
Dr. Kenneth H. Cooper
1982; 320 pp.
$16.95
postpaid from:
E.P. Dutton
2 Park Avenue
New York, NY 10016
or Whole Earth Bookstore


DR. KENNETH H. COOPER
THE AEROBICS PROGRAM FOR TOTAL WELL-BEING
EXERCISE · DIET · EMOTIONAL BALANCE

Monday:	*Ran 9.2 miles (1 hr. 41 min.)*	=	*35 points*
Tuesday:	*Ran 8.0 miles (1 hr. 30 min.)*	=	*31 points*
Thursday:	*Played 1 hour tennis*	=	*1.5 points*
Friday:	*Played 1 hour tennis*	=	*1.5 points*
Saturday:	*Ran 9.2 miles (1 hr. 24 min.)*	=	*44 points*
Sunday:	*Hiked 5 miles (2 hrs.)*	=	*4 points*
			117 points

Admittedly that's a good deal more than I need to do purely for health effects. They say the first 30 to 35 points are for your body. The rest is for your head.
—Tom Ferguson, M.D.

•

We are finding that the *timing* of aerobic exercise can provide an additional benefit in controlling stress. If you exercise at the *end of a high pressure day* — prior to the evening meal — aerobic activity can help to dissipate the stress the feel, relax you more, and even energize you so that you can continue to work or play much later into the evening than might be possible otherwise. Also, this sort of late afternoon exercise helps to depress the appetite if you are constantly fighting a weight problem.

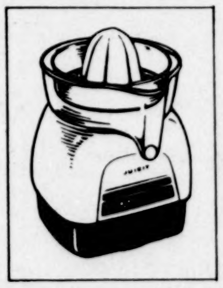
Whole Earth Access Mail Order Catalog

Our namesake, with whom we are not in any way connected except perhaps philosophically, has ***very*** *good prices for lots of the stuff you find in* ***NWEC****. I often buy tools here.*
—J. Baldwin

Whole Earth Access Mail Order Catalog
$3
postpaid from:
Whole Earth Access
2950 Seventh Street
Berkeley, CA 94710

WHOLE EARTH ACCESS
MAIL ORDER CATALOG

•



Juicit Citrus Juicer

The least expensive electric citrus juicer, the Juicit has stood up to large-quantity catering use. Stainless steel strainer oscillates to strain the juice faster. Juice pours easily from a spout into your glass. Strong motor is activated by hand pressure of the fruit on the ceramic reamer. Durable metal housing. Rinse juicing parts with water right away and it's easy to keep clean. Made by Procter-Silex. 125 watts.

	List price	Your cost
J101W White/Brown Juicit 6 lbs.	30.00	**21.41**

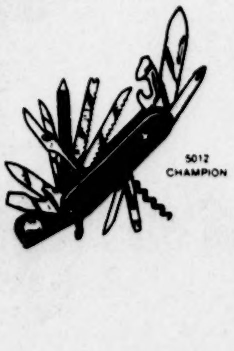
•

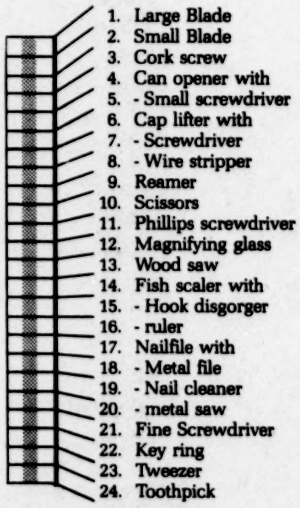
Cordless Battery Powered Drills

Carpenters like these because they're easy to use in inaccessible places like attics; and, when working with heights, there's no cord to get in the way. Especially good as screwdrivers.

Skil ⅜ "Boar Gun" Heavy duty for professional use. Reversible. Two variable speed ranges which shift gears to deliver full power in either range — high gear for fast drilling, low gear for tough drilling and screwdriving. Double reduction gearing for added torque. One hour fast charger (rechargeable up to 1000 times.) Comes with battery "power pack" recharger and chuck key.

		List price	Your cost
2016	6.5 lbs.	134.95	**107.96**


5012 CHAMPION

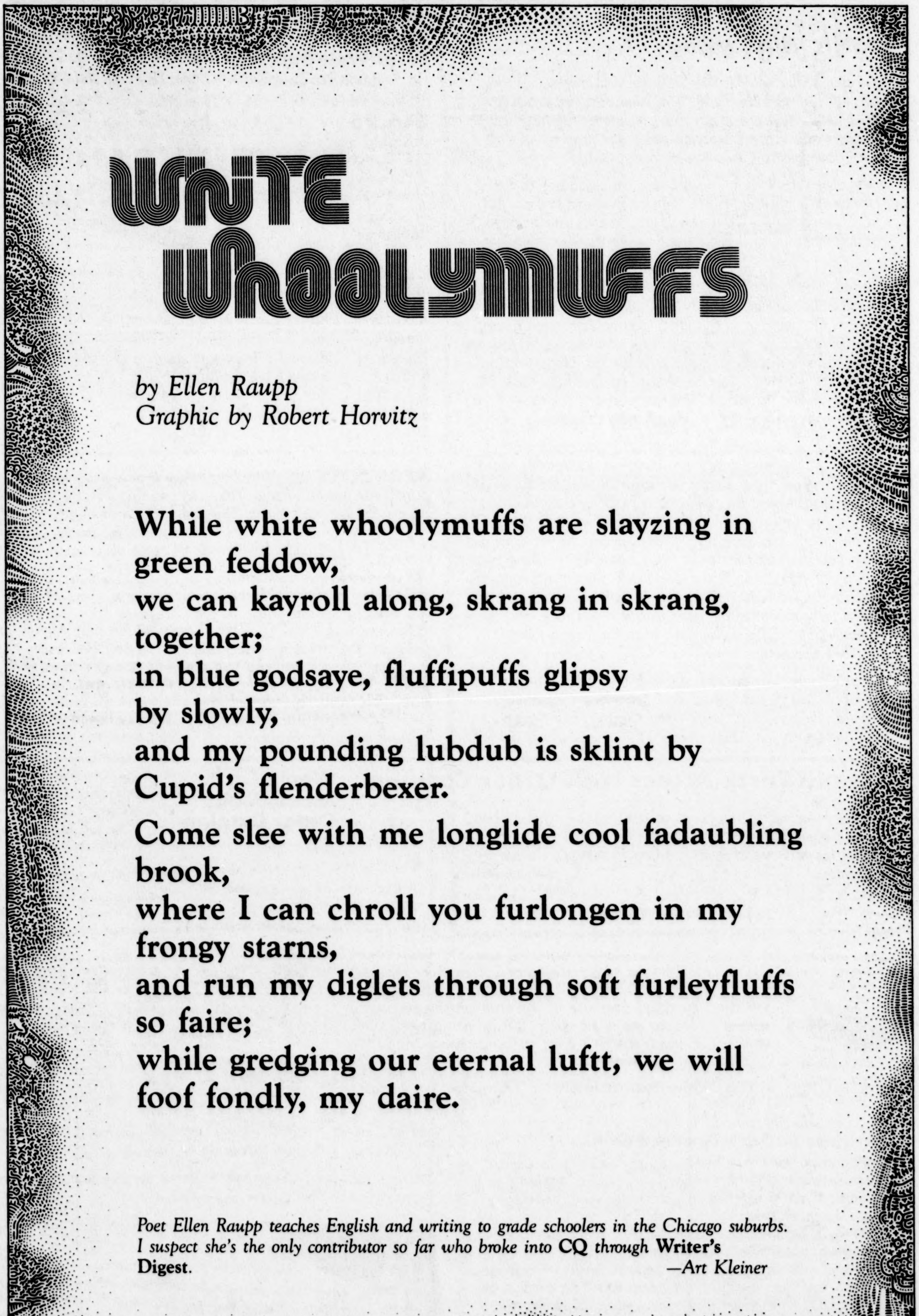

1. Large Blade
2. Small Blade
3. Cork screw
4. Can opener with
5. - Small screwdriver
6. Cap lifter with
7. - Screwdriver
8. - Wire stripper
9. Reamer
10. Scissors
11. Phillips screwdriver
12. Magnifying glass
13. Wood saw
14. Fish scaler with
15. - Hook disgorger
16. - ruler
17. Nailfile with
18. - Metal file
19. - Nail cleaner
20. - metal saw
21. Fine Screwdriver
22. Key ring
23. Tweezer
24. Toothpick

•

Victorinox Swiss Army Knife

Champion
(with everything)

List price	Your cost
48.74	**36.56**



WHITE WHOOLYMUFFS

by Ellen Raupp
Graphic by Robert Horvitz

While white whoolymuffs are slayzing in
green feddow,
we can kayroll along, skrang in skrang,
together;
in blue godsaye, fluffipuffs glipsy
by slowly,
and my pounding lubdub is sklint by
Cupid's flenderbexer.
Come slee with me longlide cool fadaubling
brook,
where I can chroll you furlongen in my
frongy starns,
and run my diglets through soft furleyfluffs
so faire;
while gredging our eternal luftt, we will
foof fondly, my daire.

Poet Ellen Raupp teaches English and writing to grade schoolers in the Chicago suburbs. I suspect she's the only contributor so far who broke into **CQ** *through* **Writer's Digest**.
—Art Kleiner

BREAKING UP: YOUR GUIDE TO PAINFUL SEPARATION

written especially for everyone by
DR. LYNDA BARRY
(COPYRIGHTED 1981)

If we make it out of this, I'm never going to worry about the little things in life again, like money and all the petty problems."

But I was gripped by hopelessness.

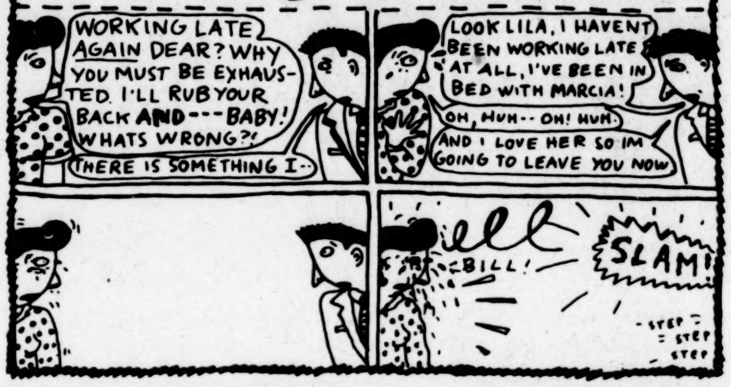
...

The condition known as the "broken heart" afflicts countless members of society daily. This tragic occurrence may develop gradually or come to pass in the wink of an eye. Each must labor to discover the torturous path out of the excruciating labyrinth of "Getting over it." Just HOW does one do it?

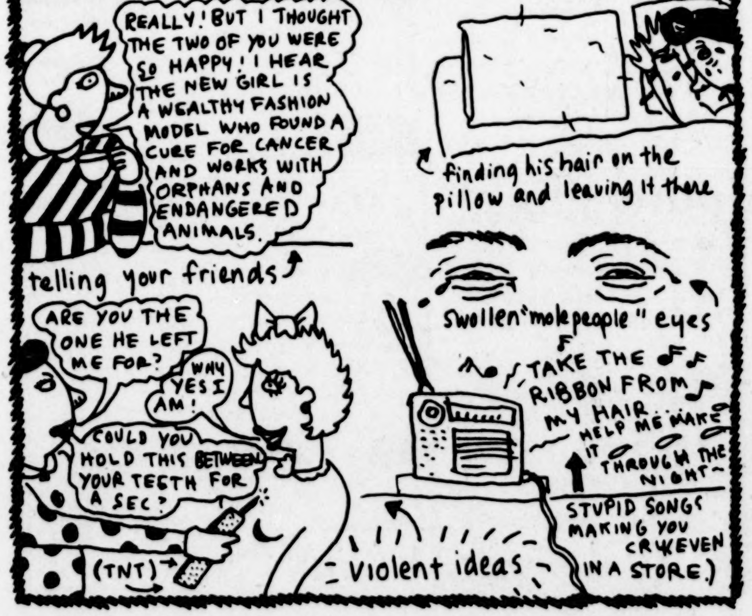
Because the end of a relationship has so many variables, I shall (due to space limitations) write this guide in 3 separate installments covering the 3 most common reasons for "BREAKING-UP"

LET US BEGIN WITH THE MOST PAINFUL:

YOUR LOVEMATE LEAVES → YOU FOR SOMEONE ELSE!


WORKING LATE AGAIN DEAR? WHY YOU MUST BE EXHAUSTED. I'LL RUB YOUR BACK AND --- BABY! WHATS WRONG?!
THERE IS SOMETHING I--
LOOK LILA, I HAVENT BEEN WORKING LATE AT ALL, I'VE BEEN IN BED WITH MARCIA!
OH, HUH-- OH! HUH.
AND I LOVE HER SO IM GOING TO LEAVE YOU NOW
BILL!
SLAM!
STEP STEP STEP

IN THIS SITUATION GETTING OUT OF TOWN LIKE A BAT OUT OF HELL IS HIGHLY ADVISED. IF YOU DO STAY YOU MAY LOOK FORWARD TO:


REALLY! BUT I THOUGHT THE TWO OF YOU WERE SO HAPPY! I HEAR THE NEW GIRL IS A WEALTHY FASHION MODEL WHO FOUND A CURE FOR CANCER AND WORKS WITH ORPHANS AND ENDANGERED ANIMALS.
telling your friends
finding his hair on the pillow and leaving it there
swollen "mole people" eyes
ARE YOU THE ONE HE LEFT ME FOR?
WHY YES I AM!
COULD YOU HOLD THIS BETWEEN YOUR TEETH FOR A SEC?
(TNT)
violent ideas
TAKE THE RIBBON FROM MY HAIR... HELP ME MAKE IT THROUGH THE NIGHT~
STUPID SONGS MAKING YOU CRY (EVEN IN A STORE.)

WARNING SIGNS

WHEN YOU FIND YOURSELF IN ANY OF THE FOLLOWING SITUATIONS, YOU ARE GETTING IN OVER YOUR HEAD. YOU MUST CALL A FRIEND AND DEMAND THEY CARE FOR YOU FOR A MINIMUM OF 3 HOURS UNTIL YOUR SENSES RETURN. CARRY THIS LIST WITH YOU AT ALL TIMES.

1. You feel a strong urge to go to your ex and his new love and dine with them, and give her gifts and tell him "it all makes sense to you" and "shes a wonderful human being."
2. You jump onto speeding vehicles from the sidewalk.
3. Men you have avoided for months suddenly look good to you.
4. You think it would be a "unique" idea to shave your head and eyebrows
5. You want to find out once and for all if Clorox and drano make a toxic gas.
6. You have a desire to tell everyone you know what you really think of them and tell your parents about your LSD trips at age 12 because there should be no more lies in this world
7. You kiss dogs on the lips with your eyes closed.

WHAT TO DO WITH YOUR TIME

TICK TICK TICK

DO:

DRINK BLACK COFFEE AND SMOKE NUMEROUS CIGS. YOU NEED TO EAT AND THIS WILL DO.

- Find out who "she" is and introduce yourself. Scrutinize her appearance and comfort yourself with thoughts of her large pores or taste in clothes.
- T.V. GUIDE Drink mass quantities of alcohol and watch T.V. all you can.
- abandon personal hygiene and cleaning your house
- Kick his car.

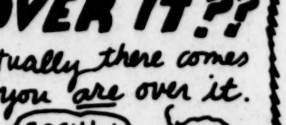
DON'T

- TAKE UP A NEW HOBBY. WHEN THE MOST HELLISH PERIOD HAS PASSED YOU WILL BE UNABLE TO DO THIS ACTIVITY EVER AGAIN IN YOUR LIFE.
- TRY TO MEET A NEW LOVEMATE VIA CHURCH ORGANIZATIONS OR NIGHT CLASSES IN BALL ROOM DANCING
- TRY TO FEEL HAPPY OR GOOD FOR 30 DAYS
- GO ANYWHERE OR DO ANYTHING
- GO NEAR HIGH BRIDGES, OPEN WINDOWS, TRUCKS THAT ARE MOVING FAST OR COUPLES HOLDING HANDS

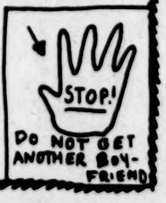
ARE YOU FINALLY OVER IT??

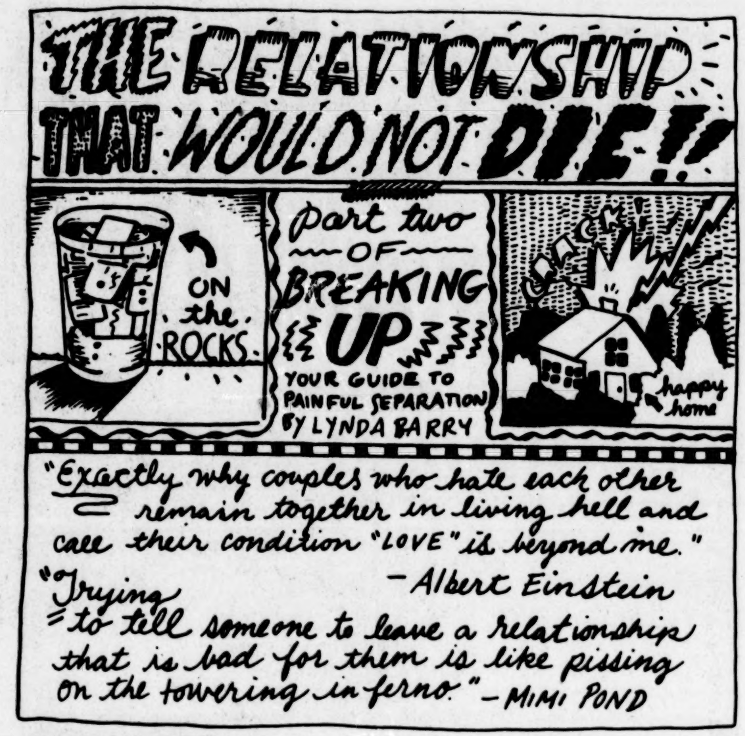
it takes a while but eventually there comes the day when you realize you are over it.

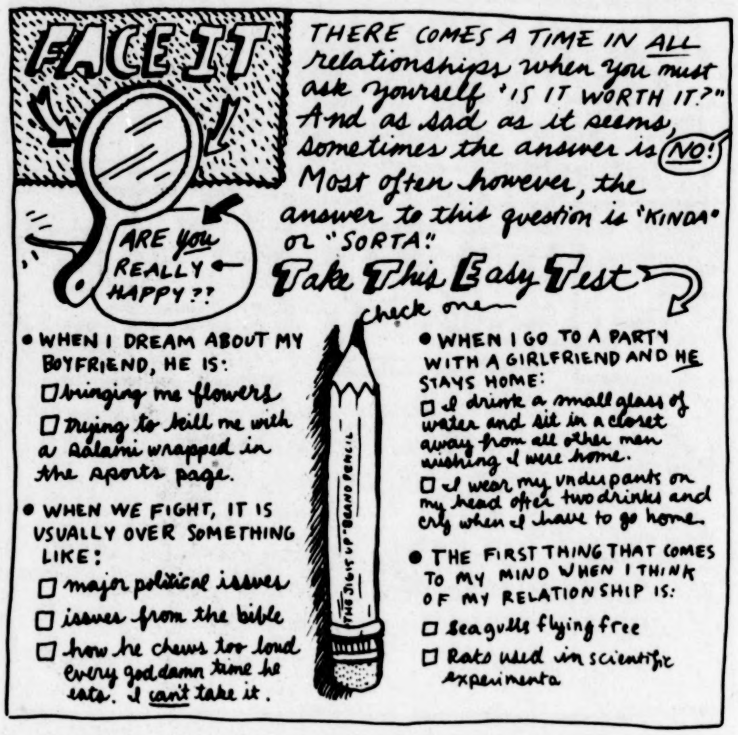
YOU CAN NOW:

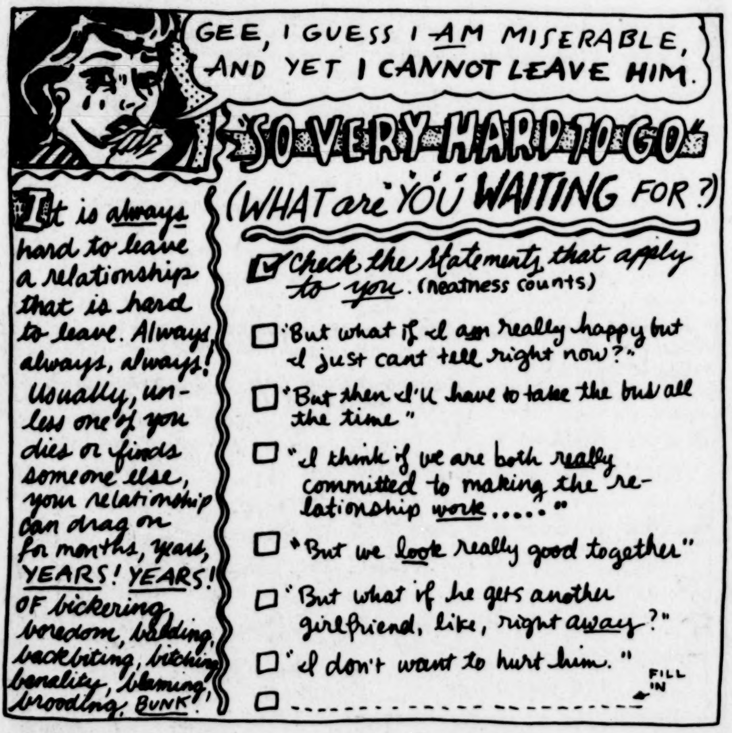

GOSH! I FEEL JUST FINE!

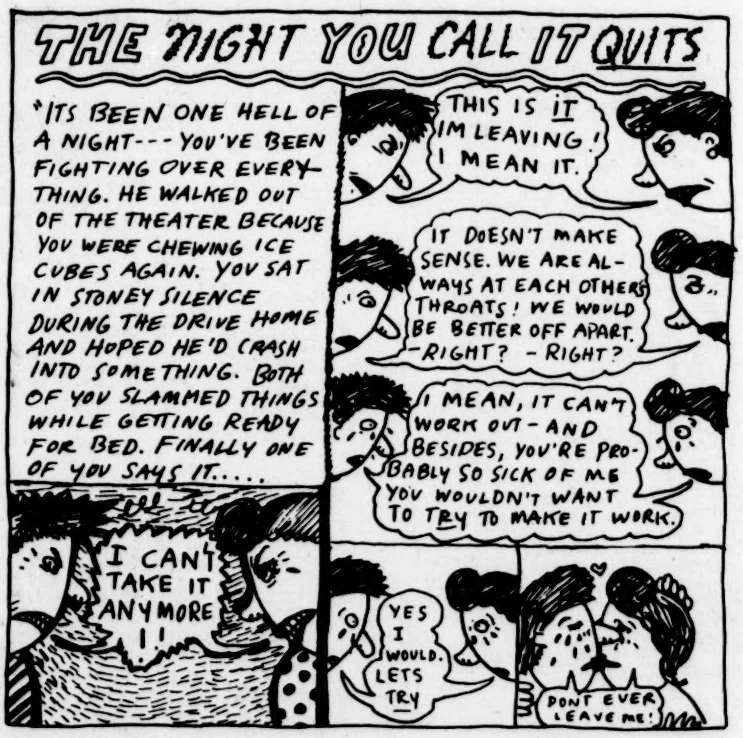
- Pass "them" on the street, greet "them" in a kind way, and not have to throw up on the next bush.
- See couples shopping together at the supermarket and not ram your cart into them.
- Kiss someone with your tongue without even thinking about your ex
- Drive past your ex in an open convertable with your hair flying and the handsome man who is driving says My Darling My Darling you are so lovely with his french accent and you wave at ex and yell "OH HI! SEE YA!"
- Yawn while talking to EX on the phone.

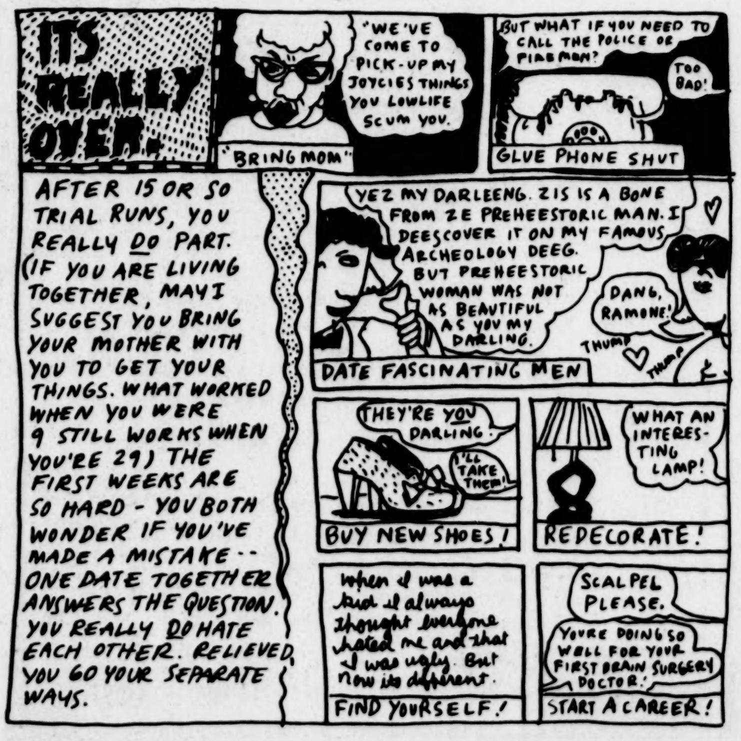

STOP!
DO NOT GET ANOTHER BOY-FRIEND

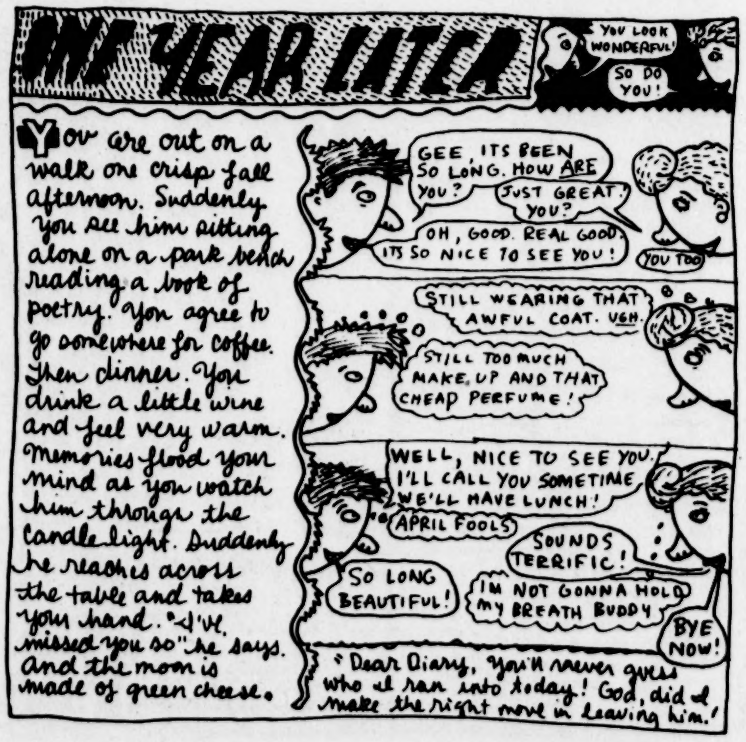

THE RELATIONSHIP THAT WOULD NOT DIE!!
ON the ROCKS
part two —OF— BREAKING UP
YOUR GUIDE TO PAINFUL SEPARATION BY LYNDA BARRY
happy home
"Exactly why couples who hate each other remain together in living hell and call their condition "LOVE" is beyond me." —Albert Einstein
"Trying to tell someone to leave a relationships that is bad for them is like pissing on the towering inferno." —MIMI POND


FACE IT
ARE you REALLY HAPPY??
THERE COMES A TIME IN ALL relationships when you must ask yourself "IS IT WORTH IT?" And as sad as it seems, sometimes the answer is NO! Most often however, the answer to this question is "KINDA" or "SORTA."
Take This Easy Test
check one
• WHEN I DREAM ABOUT MY BOYFRIEND, HE IS:
☐ bringing me flowers
☐ trying to kill me with a salami wrapped in the sports page.
• WHEN WE FIGHT, IT IS USUALLY OVER SOMETHING LIKE:
☐ major political issues
☐ issues from the bible
☐ how he chews too loud every goddamn time he eats. I can't take it.
THE "SIGN UP" BRAND PENCIL
• WHEN I GO TO A PARTY WITH A GIRLFRIEND AND HE STAYS HOME:
☐ I drink a small glass of water and sit in a closet away from all other men wishing I were home.
☐ I wear my underpants on my head after two drinks and cry when I have to go home.
• THE FIRST THING THAT COMES TO MY MIND WHEN I THINK OF MY RELATIONSHIP IS:
☐ seagulls flying free
☐ Rats used in scientific experiments


GEE, I GUESS I AM MISERABLE, AND YET I CANNOT LEAVE HIM.
"SO VERY HARD TO GO"
(WHAT are "YOU" WAITING FOR?)
It is always hard to leave a relationship that is hard to leave. Always, always, always! Usually, unless one of you dies or finds someone else, your relationship can drag on for months, years, YEARS! YEARS! of bickering, boredom, balding, backbiting, bitching, banality, blaming, brooding, BUNK!
☑ Check the statements that apply to you. (neatness counts)
☐ "But what if I am really happy but I just cant tell right now?"
☐ "But then I'll have to take the bus all the time"
☐ "I think if we are both really committed to making the relationship work....."
☐ "But we look really good together"
☐ "But what if he gets another girlfriend, like, right away?"
☐ "I don't want to hurt him."
☐ ------------------------
FILL IN


THE NIGHT YOU CALL IT QUITS
"ITS BEEN ONE HELL OF A NIGHT--- YOU'VE BEEN FIGHTING OVER EVERYTHING. HE WALKED OUT OF THE THEATER BECAUSE YOU WERE CHEWING ICE CUBES AGAIN. YOU SAT IN STONEY SILENCE DURING THE DRIVE HOME AND HOPED HE'D CRASH INTO SOMETHING. BOTH OF YOU SLAMMED THINGS WHILE GETTING READY FOR BED. FINALLY ONE OF YOU SAYS IT.....
I CAN'T TAKE IT ANYMORE !!
THIS IS IT IM LEAVING! I MEAN IT.
IT DOESN'T MAKE SENSE. WE ARE ALWAYS AT EACH OTHERS THROATS! WE WOULD BE BETTER OFF APART. -RIGHT? -RIGHT?
I MEAN, IT CAN'T WORK OUT - AND BESIDES, YOU'RE PROBABLY SO SICK OF ME YOU WOULDN'T WANT TO TRY TO MAKE IT WORK.
YES I WOULD. LETS TRY
DONT EVER LEAVE ME!


ITS REALLY OVER.
"WE'VE COME TO PICK-UP MY JOYCIES THINGS YOU LOWLIFE SCUM YOU.
"BRING MOM"
BUT WHAT IF YOU NEED TO CALL THE POLICE OR FIREMAN?
TOO BAD!
GLUE PHONE SHUT
AFTER 15 OR SO TRIAL RUNS, YOU REALLY DO PART. (IF YOU ARE LIVING TOGETHER, MAY I SUGGEST YOU BRING YOUR MOTHER WITH YOU TO GET YOUR THINGS. WHAT WORKED WHEN YOU WERE 9 STILL WORKS WHEN YOU'RE 29) THE FIRST WEEKS ARE SO HARD - YOU BOTH WONDER IF YOU'VE MADE A MISTAKE -- ONE DATE TOGETHER ANSWERS THE QUESTION. YOU REALLY DO HATE EACH OTHER. RELIEVED, YOU GO YOUR SEPARATE WAYS.
YEZ MY DARLEENG. ZIS IS A BONE FROM ZE PREHEESTORIC MAN. I DEESCOVER IT ON MY FAMOUS ARCHEOLOGY DEEG. BUT PREHEESTORIC WOMAN WAS NOT AS BEAUTIFUL AS YOU MY DARLING.
DANG, RAMONE!
THUMP THUMP
DATE FASCINATING MEN
THEY'RE YOU DARLING.
I'LL TAKE THEM!
BUY NEW SHOES!
WHAT AN INTERESTING LAMP!
REDECORATE!
When I was a kid I always thought everyone hated me and that I was ugly. But now its different.
FIND YOURSELF!
SCALPEL PLEASE.
YOU'RE DOING SO WELL FOR YOUR FIRST BRAIN SURGERY DOCTOR!
START A CAREER!


ONE YEAR LATER
YOU LOOK WONDERFUL!
SO DO YOU!
You are out on a walk one crisp fall afternoon. Suddenly you see him sitting alone on a park bench reading a book of poetry. You agree to go somewhere for coffee. Then dinner. You drink a little wine and feel very warm. Memories flood your mind as you watch him through the candlelight. Suddenly he reaches across the table and takes your hand. "I've missed you so" he says. And the moon is made of green cheese.
GEE, ITS BEEN SO LONG. HOW ARE YOU?
JUST GREAT. YOU?
OH, GOOD. REAL GOOD. ITS SO NICE TO SEE YOU!
YOU TOO
STILL WEARING THAT AWFUL COAT. UGH.
STILL TOO MUCH MAKE UP AND THAT CHEAP PERFUME!
WELL, NICE TO SEE YOU. I'LL CALL YOU SOMETIME WE'LL HAVE LUNCH!
APRIL FOOLS
SOUNDS TERRIFIC!
SO LONG BEAUTIFUL!
IM NOT GONNA HOLD MY BREATH BUDDY
BYE NOW!
"Dear Diary, You'll never guess who I ran into today! God, did I make the right move in leaving him!

"This terrible pain is going to kill me," I thought. But then I told myself, "Don't lose hope.

"Somebody has to come along and rescue me. There must be somebody who will come and help me!

"God," I prayed, "please get me out of this. Don't let me die this way . . . it's awful."

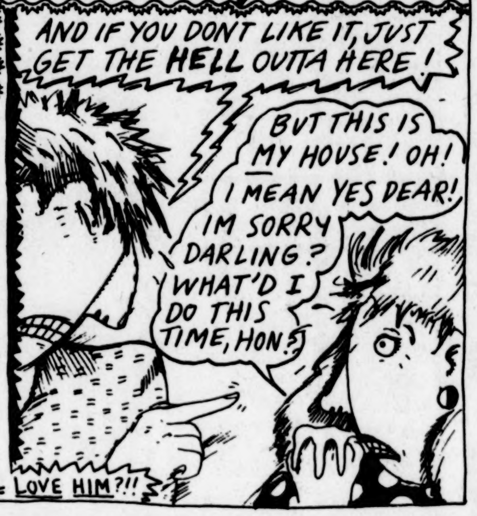
LEAVING MR WRONG

PART 3 OF "BREAKING UP" YOUR GUIDE TO PAINFUL SEPARATION

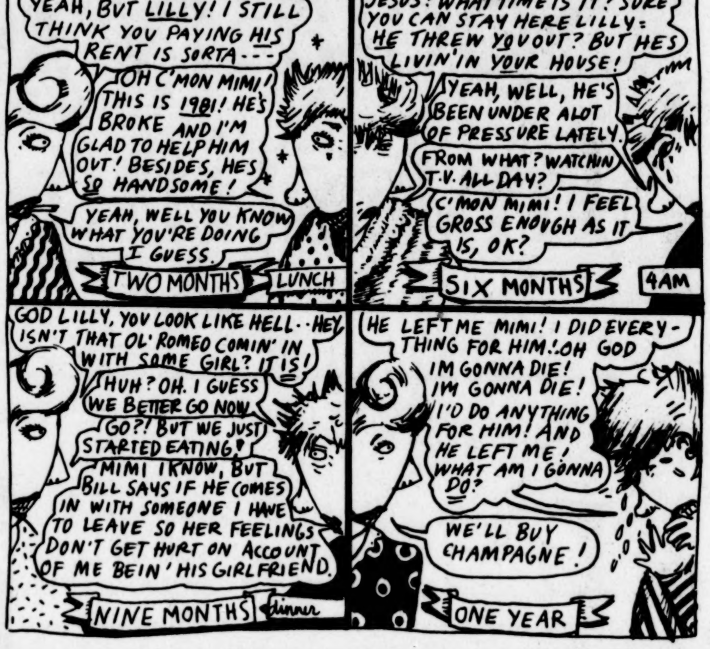
LYNDA BARRY © 1981

SHAME!

WHAT WILL YOUR FRIENDS SAY WHEN AFTER A YEAR OF COVERING UP AN ABUSIVE RELATIONSHIP YOU REALIZE YOU WANT OUT! AS FAR AS THEY KNOW MR. WRONG IS MR. RIGHT! HOW DO YOU PLAN TO TELL **THE** UGLY TRUTH? YOU CAN BARELY ADMIT IT TO YOURSELF! YOU! WITH A COLLEGE EDUCATION LET THIS MAN MAKE A MONKEY OUT OF YOU! AND HOW ARE YOU SUPPOSED TO EXPLAIN THAT YOU STILL LOVE HIM?!!

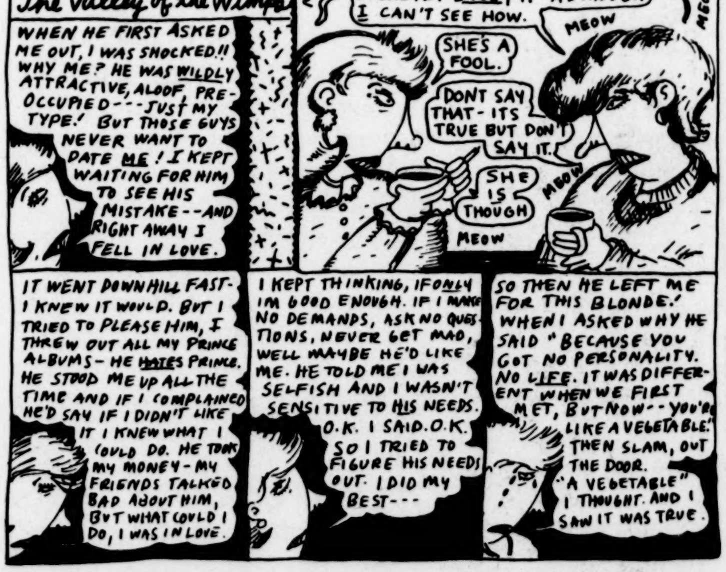

AND IF YOU DONT LIKE IT, JUST GET THE HELL OUTTA HERE!
BUT THIS IS MY HOUSE! OH! I MEAN YES DEAR! IM SORRY DARLING? WHAT'D I DO THIS TIME, HON?

WHAT HAPPENED?


YEAH, BUT LILLY! I STILL THINK YOU PAYING HIS RENT IS SORTA---
OH C'MON MIMI! THIS IS 1981! HE'S BROKE AND I'M GLAD TO HELP HIM OUT! BESIDES, HES SO HANDSOME!
YEAH, WELL YOU KNOW WHAT YOU'RE DOING I GUESS.
TWO MONTHS
LUNCH
JESUS! WHAT TIME IS IT? SURE YOU CAN STAY HERE LILLY: HE THREW YOU OUT? BUT HES LIVIN' IN YOUR HOUSE!
YEAH, WELL, HE'S BEEN UNDER ALOT OF PRESSURE LATELY.
FROM WHAT? WATCHIN T.V. ALL DAY?
C'MON MIMI! I FEEL GROSS ENOUGH AS IT IS, OK?
SIX MONTHS
4AM
GOD LILLY, YOU LOOK LIKE HELL..HEY ISN'T THAT OL' ROMEO COMIN' IN WITH SOME GIRL? IT IS!
HUH? OH. I GUESS WE BETTER GO NOW
GO?! BUT WE JUST STARTED EATING!
MIMI I KNOW, BUT BILL SAYS IF HE COMES IN WITH SOMEONE I HAVE TO LEAVE SO HER FEELINGS DON'T GET HURT ON ACCOUNT OF ME BEIN' HIS GIRLFRIEND.
NINE MONTHS
dinner
HE LEFT ME MIMI! I DID EVERYTHING FOR HIM! OH GOD IM GONNA DIE! IM GONNA DIE! I'D DO ANYTHING FOR HIM! AND HE LEFT ME! WHAT AM I GONNA DO?
WE'LL BUY CHAMPAGNE!
ONE YEAR

HOW?

JUST HOW DID I ENTER The Valley of the Wimps


HOW CAN SHE STAND IT? HE TREATS HER LIKE DIRT AND SHE CRAWLS BACK FOR MORE!
SOME PEOPLE ARE GLUTTONS FOR PUNISHMENT YOU KNOW..
YOU'RE RIGHT - SHE MUST SECRETLY ENJOY IT - ALTHOUGH I CAN'T SEE HOW.
SHE'S A FOOL.
DONT SAY THAT - ITS TRUE BUT DON'T SAY IT.
SHE IS THOUGH
MEOW
MEOW
MEOW
MEOW
MEOW
MEOW
MEOW
WHEN HE FIRST ASKED ME OUT, I WAS SHOCKED!! WHY ME? HE WAS WILDLY ATTRACTIVE, ALOOF, PRE-OCCUPIED---JUST MY TYPE! BUT THOSE GUYS NEVER WANT TO DATE ME! I KEPT WAITING FOR HIM TO SEE HIS MISTAKE--AND RIGHT AWAY I FELL IN LOVE.
IT WENT DOWNHILL FAST- I KNEW IT WOULD. BUT I TRIED TO PLEASE HIM, I THREW OUT ALL MY PRINCE ALBUMS - HE HATES PRINCE. HE STOOD ME UP ALL THE TIME AND IF I COMPLAINED HE'D SAY IF I DIDN'T LIKE IT I KNEW WHAT I COULD DO. HE TOOK MY MONEY - MY FRIENDS TALKED BAD ABOUT HIM, BUT WHAT COULD I DO, I WAS IN LOVE.
I KEPT THINKING, IF ONLY IM GOOD ENOUGH. IF I MAKE NO DEMANDS, ASK NO QUESTIONS, NEVER GET MAD, WELL MAYBE HE'D LIKE ME. HE TOLD ME I WAS SELFISH AND I WASN'T SENSITIVE TO HIS NEEDS. O.K. I SAID. O.K. SO I TRIED TO FIGURE HIS NEEDS OUT. I DID MY BEST---
SO THEN HE LEFT ME FOR THIS BLONDE! WHEN I ASKED WHY HE SAID "BECAUSE YOU GOT NO PERSONALITY. NO LIFE. IT WAS DIFFERENT WHEN WE FIRST MET, BUT NOW--YOU'RE LIKE A VEGETABLE." THEN SLAM, OUT THE DOOR. "A VEGETABLE" I THOUGHT. AND I SAW IT WAS TRUE.

WHY CAN'T I LEAVE?

THATS WHAT I WANNA KNOW!

- you know the relationship is rotten. You feel miserable all of the time. He treats you very badly, takes your money, humilates you in public and sleeps with your friends.
- For awhile you thought all of this might be your fault but now your kinda sure he's a jerk.
- And still you can't leave him. If he threatens to leave you, you become hysterical.
- You hear people say "It takes two to tango" and you are letting him do this to you and you secretly want it. You don't know what the hell they are talking about.

MULTIPLE CHOICE

CHECK ALL ANSWERS WHICH APPLY TO YOU, DEAR.

1. I realize my boyfriend is a jerk, but I stay because

☐ Deep inside I know he really loves and needs me

☐ He doesn't really mean those awful things

☐ - I won't have a boyfriend if I leave him. Then what?

☐ He'll get a new girl friend and I'll go insane

☐ I have no idea.

☐ He may seem like a jerk to you but I know him.

2. When I see other women and men being nice to each other and they look happy -

☐ I start crying even if its on a commercial - but I don't know why

☐ I think that deep inside they are miserable.

☐ I want to kill them.

☐ I have never seen this.

☐ I think they are brothers and sisters

☐ I ask for their autograph

3. When my friends tell me that I must secretly desire my boyfriend to be mean to me...

☐ I secretly wonder if they are right.

☐ I say "oh want a helpful and original concept"

☐ Feel ashamed and offer to pay for lunch

☐ Push the table over and say "Is that so?"

WHAT YOU WILL NEED...

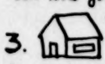
ENOUGH IS ENOUGH IS ENOUGH!! One day something snaps inside of you and you know you are going to leave. You're probably terrified - not knowing what will come next. Maybe you still love him - Maybe you are way too ashamed that you took so much abuse for a year and finally had to admit defeat. Maybe you have no place to go - no money... But after you feel that funny snap in your chest the day is done. Here are some things you will without a doubt need to get you through the first four weeks

1. A BEST FRIEND

very important! you'll need all hours access to her. It helps if she never liked your boyfriend in the first place

2 CASH MONEY

Even if you've never borrowed before in your life - if you have to borrow money for this month than do. Have alot of it.



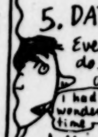
3. YOUR OWN PLACE

It must not be a hellhole. You must be comfortable there. Must have heat.

4. WILD PANTIES!

The remarkable effect nice underpants has on a womans psyche is still being studied. Spend at least $30^{00}. Go wild

5. DATE A NICE MAN.


I had a wonderful time

Even a boyscout will do. Its important to find out fast that not all men are creeps. I'm not saying fall in love with him, just have dinner and experience a few kind words.

6. TAKE A TRIP

Even a weekend in a neighboring city. Bring your underpants and your best friend. Have a ball. Get a hangover.

7. STAY AWAY FROM MR. WRONG

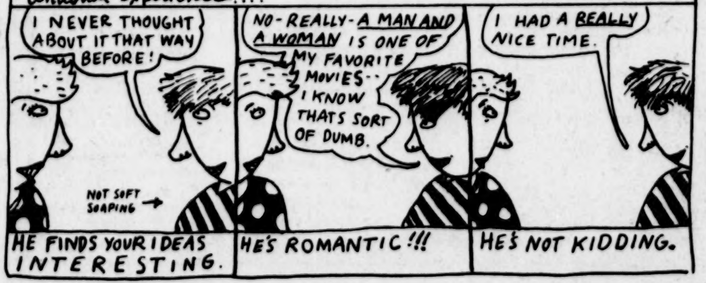
It happens over and over again that Mr Wrong will suddenly transform into a pure angel the minute you try to leave. The more you stand up for your needs the sweeter he becomes. Beware! Beware! The minute you give in, the same thing happens all over again.

NOW WHAT?

"AND AS HE, WHO WITH PANTING BREATH HAS ESCAPED FROM THE DEEP SEA TO THE SHORE, TURNS TO THE DANGEROUS WATER AND GAZES"! - dante alighieri

LET'S HAVE A
FRANK
TALK ABOUT
MEN

Its no news to anyone that nice guys finish last. Almost every female I know has had the uncomfortable experience of going out with "a nice man." Spelled "NERD". How many times has your girlfriend said "Hes so sweet and so cute so why don't I like him?" Lets face it, when an attractive but aloof ("cool") ~~and intelligent~~ man comes along, there are some of us who offer to shine his shoes with our underpants. If he has a mean streak, somehow this is "attractive" There are thousands of scientific concepts as to why this is so, and yes, yes, its very sick - but none of this helps. May I suggest experimenting with those "nice guys." as excruciating as it is, try going to dinner and a movie with a man in your crowd who is "sweet." For some of us this will be a very unusual experience....


I NEVER THOUGHT ABOUT IT THAT WAY BEFORE!
NOT SOFT SOAPING
HE FINDS YOUR IDEAS INTERESTING.
NO - REALLY - A MAN AND A WOMAN IS ONE OF MY FAVORITE MOVIES.. I KNOW THATS SORT OF DUMB.
HE'S ROMANTIC!!!
I HAD A REALLY NICE TIME.
HE'S NOT KIDDING.

end

Socially Responsible Investing

by Joe Kane

LET'S SAY YOU HAVE $2000, $10,000, $100,000. You want to invest it, but you don't want it to support defense department contractors, builders of nuclear power plants, or tobacco companies — not because you consider them financial risks but because you perceive their business practices to be morally incorrect. You are, in the jargon of the trade, seeking a "socially responsible" investment, and you are part of one of the most important new voices in the American economic dialogue.

Just what is a socially responsible investment? There are as many definitions as there are people of conscience. A deposit in a local savings and loan, with the stipulation that your funds go toward home loans in your neighborhood, can be a socially responsible investment, as can an investment in an alternative energy company or in a company that treats its workers well.

Or you might invest in one of the half dozen socially responsible mutual and money market funds, such as the Pax World Fund, which won't support defense contractors or buy liquor, tobacco, or gambling stock.

In short, in the field of socially responsible investing, only one broad definition applies: the investor asks not only how much of a return an investment will make, but *what kind of work is being done with the investment*. It is this attitude of *paying attention* — not just to returns but to quality of work, moral intent, and social consequence — that suggests a profound shift in the American economic psyche.

THE ROOT OF SOCIAL investing is in large institutions, primarily churches and universities. In the last decade, in response to Vietnam, Watergate, the environment, etc., these institutions reexamined their portfolios, raising questions about apartheid in South Africa, discrimination in hiring, environmental impact, and political affiliation. They found their economic weight could sometimes sway even large multinational corporations. Unions, pension funds, and individuals have begun to follow suit.

As social investing has grown it has strengthened itself by developing an extensive research network. Organizations like the Council on Economic Priorities and the Interfaith Council on Corporate Responsibility have amassed information on which corporations are doing what where, and have made this information readily available to the public.

The momentum social investing has gained is just now opening up investment opportunities for small investors. While wealthy individuals have long had the financial freedom to back such risky but noble endeavors as alternative energy development, the individual with one, five, or ten thousand dollars really didn't have anywhere to go with it. The last few months alone, however, have seen the emergence of a newsletter — **Good Money** — and several mutual and money market funds aimed specifically for the small investor, with more to follow soon.

THE QUESTION THAT remains is that of the bottom line: can I expect my socially responsible investment to offer any kind of return? The answer is an emphatic yes. Indeed, you can often expect socially responsible investments to offer a better return than "dirty money" investments, primarily because social investments are concerned with quality — of service, of product, of human concern.

Let's take a particularly graphic example:

Ritchie Lowry, a sociologist at Boston University and the publisher of **Good Money**, the best available journal on social investing, recently completed a

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Joe Kane, intrepid **CQ** *researcher, also coedits the weekly Whole Earth Catalog column in the* **San Francisco Chronicle**, *for which the original version of this article was written.* —*Jay Kinney* study of utility companies, traditionally a solid investment. He divided 25 major utilities into three groups: those with a large or primary dependence on nuclear power, such as Commonwealth Edison and Carolina Power and Light; those with a developing but not yet substantial dependence on nuclear power, such as PG&E and Arizona Public Service; and those with no dependence on nuclear power, such as Hawaiian Electric, which depends primarily on oil but has made a large commitment to developing geothermal and wind power, and Magma Power, which uses only geothermal power.

For the period from 1974 to 1982, the nuclear based stocks appreciated 24 percent; the mixed group, 52 percent; and the nonnuclear group, 184 percent. (Excluding Magma, which started out as a penny stock in the mid-60s and was recently bought by Natomas Power for $45 a share, the nonnuclear group still appreciated 60 percent.)

Dividends followed a similar line: dividends for the nuclear based group increased an average of 30 percent; for the mixed group, 59 percent; and for the nonnuclear group, 71 percent. (Excluding Magma, which paid no dividends at all, the nonnuclear group increased an average of 81 percent.)

In industry, too, socially responsible companies have proven to be big earners. Lowry points to Worthington Industries as an example. Worthington is primarily a producer of steel products. Over the last decade, it started a profit sharing program for its employees, with shares paid quarterly to better reflect performance; it put all employees on salary, thereby eliminating one of the more bitter dividers between white- and blue-collar workers; and it greatly trimmed its executive staff, to a total of 17 in an employee force of 4900, thereby reducing top heavy executive salaries and perks. In addition, while other companies complained about and fought environmental regulations, Worthington kept well ahead of pollution-control guidelines, avoiding the fiscal burden of forced compliance.

Socially responsible investments often offer a better return than "dirty money" investments.

The result? From 1970 to 1980, while most of the American steel industry underwent convulsions nigh unto death throes, Worthington saw its total sales increase by more than a 1000 percent and its earnings per share increase by more than 2500 percent. Dividends increased from one to 48 cents a share, and the average yearly stock price went from 63 cents a share to $18.38.

SUCH PERFORMANCES are not limited to a few isolated examples. Indeed, with regard to socially responsible investments, they can be found across the board.

Steve Moody is a portfolio manager for U.S. Trust, the acknowledged leader in the social investment field. For more than a decade now, U.S. Trust has been screening portfolios for clients concerned with specific social issues. By 1981, 17 percent of the bank's existing accounts and 30 percent of its new accounts, representing some $20 million, were social accounts.

For his part, Moody maintains that "you have to be willing to settle for less with social investments, because performance is a function of style, and by looking for social desirability, you've already limited your style."

With that caveat in mind, however, Moody offers some interesting statistics: Over the last three years, U.S. Trust's socially concerned accounts have outperformed their pooled pension accounts, which have no constraints other than security and performance.

The pooled pension accounts showed an 18.7 percent annual return, while the socially concerned accounts had a 19.2 percent return, which would have placed them, when considered on their own, among the top ten percent of balanced fund accounts.

SOCIAL INVESTING IS an idea that has attracted public support both for its idealism and for its substantial financial viability. That *socially responsible* is a term open to the broadest of interpretations is not really important. What matters is that investors are asking that attention be paid to consequences beyond profits.

We can expect to see social investing grow mightily in the next few years. Many investment opportunities will open up for investors both large and small. Research and screening, vital elements both, will become even more thorough and accessible, especially as stock brokers and money managers see increased demand for such services. Socially responsible money market and mutual funds will increase in number. Perhaps most important, businesses and corporations will find themselves rewarded for paying closer attention to real human needs.

Listed below are resources for the investor seeking to make socially responsible investments. Though intended for the small investor, they should prove useful to the large investor as well. The money market and mutual funds listed here are by no means the only available social investments. Indeed, describing the full range of such investments is beyond the scope of this article. A very good resource list, however, is available from Strategic Investments Advisors, a registered not-for-profit investment advisor that for the last ten years has specialized in ethical investing. Send a stamped, self-addressed

The embattled savings and loan associations might be just the place a socially conscious small investor wants to go.

envelope to Strategic Investment Advisors, P.O. Box 607, Star Route Muir Beach, Sausalito, CA 94965.

Mutual and Money Market Funds

Because there is no official definition of a "socially responsible" investment, what you are getting from such a self-described fund is an indication that it uses criteria in addition to security and return in making its investments. These criteria vary widely. While the Dreyfus Third Century Fund, for example, touts consumer safety and environmental protection, it also invests in large energy and aerospace companies. Similarly, while the Pax World Fund won't invest in the war effort, it embraces the likes of Walt Disney, Inc., and Time, Inc., companies some might find unpalatable.

In short, read the prospectuses carefully.

Calvert Social Investment Fund: Calvert has two social funds, one a mutual fund, the other a money market fund, both of which have U.S. Trust as the screening subadvisor. The money fund invests primarily in funds from banks it considers socially responsible, as well as in some World Bank funds. It will not invest in T-bills, a portion of which go to defense spending. The Managed Growth Fund invests in stocks of such companies as Apple, MCI, Magma Power, Citizens Utility and Waste Management, as well as in government housing funds.

Calvert Social Investment Funds, information free from the Calvert Group, 1700 Pennsylvania Avenue, N.W. Washington, D.C. 20006; (800) 368-2748.

Dreyfus Third Century Fund: The granddaddy of the social investment funds, Dreyfus has been around almost a decade. While Third Century describes itself as dedicated to "protection of the environment, occupational health and safety, consumer protection . . ." its investment policies are murky at best and include such questionable investments as large energy and aerospace companies. Still, they have a proven track record. Read their prospectus and see if it fits your needs.

Dreyfus Third Century Fund, information free from 767 Fifth Avenue, New York, NY 10022; (800) 645-6561.

Foursquare Fund, Inc.: Foursquare was started by Christian Scientists and Mennonites and will not invest in companies producing alcohol, tobacco and pharmaceutical products. A warning, though: A Foursquare official told us that it's quite likely the fund will drop its social criteria by the end of 1983.

Foursquare Fund, information free from Eaton and Howard Vance Sanders, Inc., 24 Federal Street, Boston, MA 02110; (617) 482-8260.

Pax World Fund: The Pax mutual fund was started in response to the Vietnam War. It will not invest in the 100 largest defense contractors, in companies for whom 5 percent or more of their sales are to the Defense Department, in T-bills (a portion of T-bill money goes to defense), or in liquor, tobacco, or gambling stock. Pax will invest in companies that it feels make a "positive contribution" to the society. These include H.J. Heinz, Merck Drug, Walt Disney, Inc., Time, Inc., U.S. Home, and C.R. Bard.

Pax World Fund, information free from Pax World Management Organization, 224 State Street, Portsmouth, NH 03801; (603) 431-8022.

Working Assets Money Fund: Working Assets is a money market fund based in San Francisco that should be available by the time you read this. Its organizers include Jerry Dodson, former president of Continental Savings and Loan, and John Harrington, the chairman of former California Governor Jerry Brown's Public Investment Task Force. Working Assets will invest primarily in short term securities, including government paper for housing, education and Small Business Administration loans, as well as in commercial paper from companies meeting such criteria as affirmative action hiring policies, a majority of employees employed in the U.S., compliance with EPA standards, no strategic investments in repressive foreign regimes. A prospectus is available now.

Working Assets Money Fund, information free from: 1427 Shrader Street, San Francisco, CA 94117.

Good Newsletters and Research Services

Good Money: This bimonthly newsletter, begun last fall, is the single most comprehensive journal of social investing. It includes analyses of socially responsible companies, investment advice, book reviews, and pertinent news items, all delivered with a nice mix of wit and passion. It's edited by Boston University sociologist Ritchie Lowry (quoted above) and his son Peter. There's a bonus: subscribers get a free ad in **Netbacking**, **Good Money**'s bimonthly supplement.

Good Money, $36/year, 6 issues, from the Center for Economic Revitalization, Inc., Box 363, Worcester, VT 05682.

Interfaith Center for Corporate Responsibility: The ICCR, a coalition of 180 Protestant and Catholic churches, researches corporate activity for church investors and makes their findings available both over the phone (212-870-2295) and through their newsletter, **The Corporate Examiner**. The Examiner reports on what churches and other groups are doing in the way of social pressure on corporations and publishes briefs on such topics as banks with investments in South Africa, firms with investments in Chile, Agent Orange, and Dow Chemical, follow-ups on the Third World infant formula crisis, pharmaceutical dumping in the Third World, and genetic engineering and marketing.

The Corporate Examiner, $25/year, 11 issues, from the Interfaith Center for Corporate Responsibility, Room 566, 475 Riverside Drive, New York, NY 10115.

Council on Economic Priorities: "One of the most effective checks on American corporate mischief is this nongovernmental research organization. Their reports have earned such confidence that they are routinely transmitted through the economic pages of the **New York Times**, the **Wall Street Journal**, etc. What the reports detail is the actual anatomy of corporate activity in terms of pollution, worker's rights, defense contracts, relations with South Africa, energy, pricing, political activity, etc., etc. Credit is given where it is due and blame likewise. A quiet, pointedly effective service."

—Stewart Brand, **NWEC** p. 386

Council on Economic Priorities Newsletter, $25/year, 10 issues, from Council on Economic Priorities, 84 Fifth Avenue, New York, NY 10011.

Banks and Savings and Loans

The embattled savings and loan associations might be just the place a socially conscious small investor wants to go. You can help improve your own neighborhood: go to your local S&L and tell them you want your deposit to go to local home and home improvement loans. Another good thing about S&Ls is that unlike most large banks, they don't lend money outside the country and they don't lend to large corporations.

Banks aren't necessarily ogres. Many banks, especially smaller local banks, work hard to put money back into the community. One of the most socially responsible acts you can perform is to investigate the investment policies of your local banks and then patronize them accordingly. Banks do change their lending policies in reaction to customer complaints. People involved in institutions like churches, clubs, and schools especially can exert influence and bring about change on a large scale. ■

Community Jobs

Good intentions that aren't grounded in real-world activity soon evaporate or turn into impotent cynicism. Finding a job which enables you to help people, work towards peace and justice, or research social ills while meeting the rent can be a great solution.

***Community Jobs** is a monthly tabloid which runs page after page of listings for jobs and internships with public interest groups, citizen action organizations, and grassroots efforts all across the U.S. Each issue also includes news of resources available for such groups and one or two lengthy articles on specific organizations or related topics like meeting-planning or cooperative management.*

*Two caveats from opposite ends of the spectrum: Neoconservatives are likely to consider most of these jobs as "new class" ventures — do-good slots for a liberal elite intent on institutionalizing their class values. Radical critics on the other hand may dismiss them as "reformist" efforts which fail to tackle the Big Picture. There's some truth in both gripes — but to take either as an excuse for inaction benefits no one but the status quo. Better to risk a label, try a job, and make a difference. **Community Jobs** is a good place to start. —Jay Kinney*

[Suggested by Christopher Bell]

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Internship Detroit

Teamsters for a Democratic Union (TDU) is a national organization of rank and file Teamsters who are seeking to return control of the union to its membership. TDU's national office is in Detroit with chapters throughout the U.S. The national office produces a monthly newspaper, ***Convoy Dispatch***, and other literature and provides staff organizers.

Duties: Send out mailings; fill orders for materials; file; help produce newspaper, leaflets and bulletins; occasionally develop projects.

Making A Social Investment
Co-op America

Community Jobs
Glee Murray, Editor
$12/year (10 issues)
from:
Community Jobs
1520 Sixteenth St. NW
Washington, D.C. 20036

Requirements: Skills in typing, layout, typesetting, darkroom, etc., helpful but not necessary; willingness to work hard for little pay; desire to learn about and assist the rank and file movement; some knowledge of labor politics useful.

Salary: $75/week. Housing. Minimum 3-month commitment, longer preferred.

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Rural Organizers
Edwardsville, Illinois

The Farm Alliance is a coalition of progressive statewide farm organizations and multi-issue county organizations in rural areas. The Alliance is developing a powerful new force in Illinois politics. Working together with labor and consumer organizations, the Alliance is pushing innovative legislative solutions to achieve equity for the family farmer.

Duties: Coalition building; issue/program development; leadership development; fundraising.

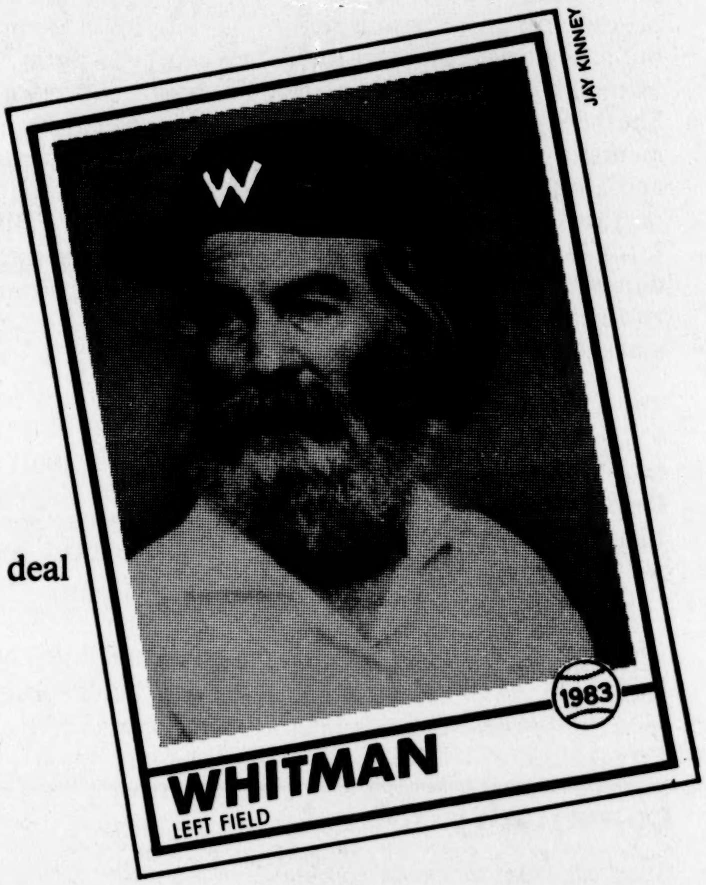
Requirements: Concern for economic justice and social change; maturity; responsibility; self-starting; effective communication skills; willingness to work flexible hours; must have car; some organizing experience preferred.

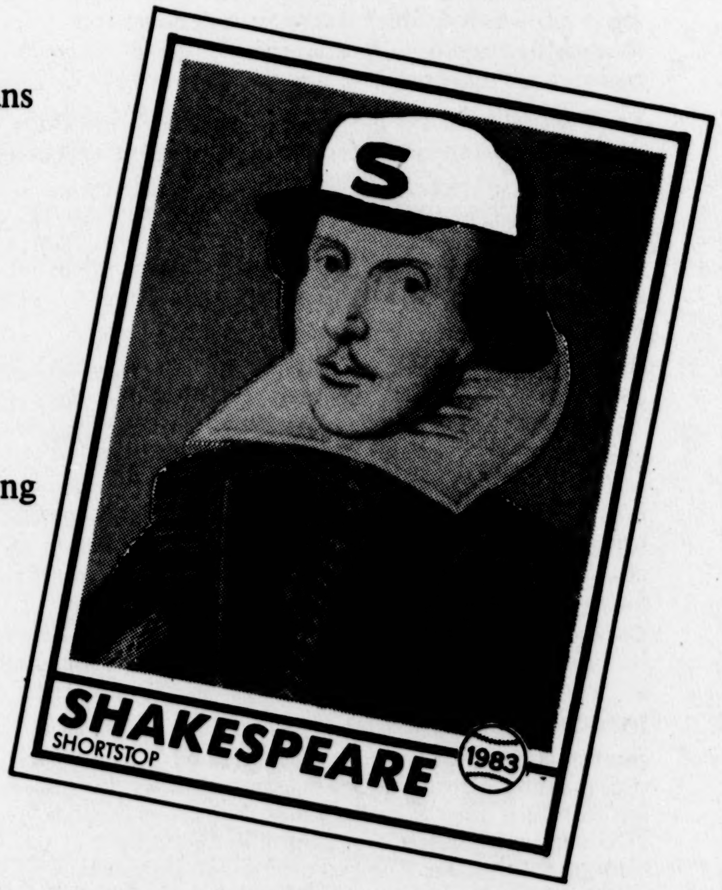
Salary: $8,000—15,000/year, negotiable, based upon experience and ability.

Poem to be Named Later

by Stephen Bieler

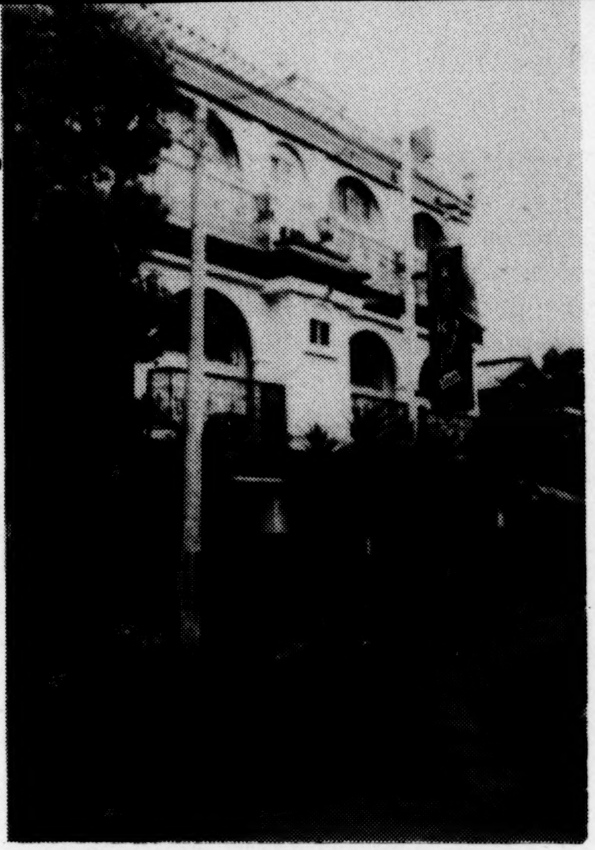
The interleague trading deadline was
approaching for the American
and National Poetry Leagues. The
Sioux City Shakespeares and the Wichita
Whitmans were working on an eight-poem deal
involving three epic narratives,
two speedy blank verse ballads, two
sexy limericks, and a love poem
in iambic pentameter. The
deadline drew near but still the Sioux City
front office wasn't satisfied.
After all, they had led both leagues in
allusive alliteration the
year before. They wanted more. The Whitmans
needed some good defensive back-up poems
that could also hit with power. So
at the last moment they threw in an
undisclosed amount of rhyming
dictionaries and a poem to be named
later. You are now reading the poem
to be named later. It stayed two seasons
with the Shakespeares, most of the time sitting
on the bench, before being sent down to
the Biscayne Byrons in the double-A
Couplet League. Last winter it retired
from pro poetry and went to work in
the accounting department of a bank
in Fort Lauderdale. They never did
get around to naming it. ■





*About this poem Stephen Bieler recounts, "I wrote it because my sister Gayle was complaining that the poetry they made her read in seventh grade was boring. What fun could be found in poetry? I tried to answer her question." It has also appeared in the Fall 1978 issue of **Dark Horse** and is © 1978 by Stephen Bieler. —Jay Kinney*

JAPANESE "LOVE" HOTELS



Hotel LOVE INN in the Gion District in Kyoto.

by Michael Phillips and Greta Alexander

The Japanese have always had a reputation for being a sensual, erotic people. There does exist a vast collection of erotic Japanese art which spans the centuries. There are sex tours all over the world for Japanese men; pornographic cartoons appear in most Japanese men's and women's magazines; and despite American competition the Japanese still make the best vibrators. Yet little information has surfaced here describing any aspect of their sex lives.

One phenomenon unique to Japan which might allow a glimpse into Japanese private lives is the thriving love-hotel business. Love hotels exist nearly everywhere except small villages. Their uniqueness is not only in the fact that couples are charged by the hour but in their interior and exterior design. A love hotel can be a dry-docked ship, a castle, or some fantastic flight of architectural fantasy with rooms ranging from sedate traditional styling to a sadomasochism chamber or orgy room. All love hotel rooms have several items in common — a refrigerator stocked with beer, champagne, sake, soft drinks and various foods; a closed-circuit porn TV; and some type of cabinet with a selection of sex toys, lotions, liquor, underwear, porn magazines, and condoms. Many love hotels have room service which delivers hot food and sex paraphernalia. An honor system allows guests to pay for the items used when checking out of the hotel.

A tourist roaming the streets of Tokyo or Kobe might have difficulty locating a love hotel of traditional design since they tend to blend into the residential areas surrounding them, but the educated eye would immediately recognize the two symbols: a purple sign and discreet low wall several feet in front of the entrance. Not all love hotels encourage tourists, since it is assumed they will misunderstand the nature of the "hotel," and in many places where English is not spoken, foreigners are turned away. We had that experience once, but after explaining in Japanese that we understood where we were, our hostess made us welcome.

We investigated two typical love hotels. The Hotel Love Inn is located in the heart of the love hotel section of Kyoto where we counted over 20 hotels within 200 yards of one another. (Tokyo far exceeds these numbers.) In the elegant lobby was a display board showing color transparencies of the rooms and their prices. This system enables guests to select their room rather than taking one sight unseen — a definite advantage when you have a specific mood in mind but can't or don't want to explain it to the hostess. The photos which are lit are

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*Every few issues, Michael Phillips (author of **The Seven Laws of Money**, NWEC p. 308, and **Honest Business**, NWEC p. 304), likes to stir things up with an article questioning commonly held assumptions. His most recent such piece, "White America Is Predominantly a Viking Culture" (Summer '82 **CQ**), caused Fred Fuller to send us this issue's "Barbarians and Empire" (see page 14). Meanwhile, Michael and friend Greta Alexander voyaged on to Japan, where they enthusiastically researched this glimpse at the new frontiers of motel management.*
—Jay Kinney

available, dark ones are in use. At three p.m. on a Thursday, almost half of the rooms were taken (perhaps the "bargain matinee" rates are a big attraction). Prices ranged from $10 for two hours for a standard luxury room to $15 for an S/M room with chains and $30 for an orgy room.

When you arrive in your room, a pot of hot green tea awaits you, as is the custom in all lodgings in Japan. The rooms are immaculate, bed linens crisp and fresh. In our room a panel at the head of the bed controlled the lights and five channels of mood music. We also had a TV with a porn station and an illustrated catalog of sex toys that could be ordered by telephone. The only other notable feature was the large window between the bedroom and bathroom.

In Tokyo we visited the legendary Meguro Emperor, a six-story hotel with about six rooms per floor. Our room had a musical theme — large music notes on the walls and a tape system, very popular in Japanese bars, which allows you to select from hundreds of music-only tapes of folk and standard songs, including some American songs. Also provided were a songbook and a microphone with an echo effect, which makes you sound like professionals in a recording studio — a fantasy many people have had, judging from the condition of the equipment.

The room also had a large, round, rotating bed with a control panel at the headboard, mirrors on the ceiling and side wall, and an automatic TV camera which recorded everything on the bed for 45 minutes, simultaneously displaying it in black and white on the screen. The camera's focal length changed about every ten minutes. When the video tape finished, it rewound and automatically played back, complete with sound.

The rest of the room featured the usual porn TV programs and a refrigerator. Sex toys were available from the display case. There was a lucite tub with mirrored floor in the bathroom. As in all love hotels, fresh toiletries for men and women were provided — skin lotion, shampoo, soap, cologne, after-shave, razor, shave cream, toothbrush and paste, combs, shower caps. There were also robes and large fluffy towels. The cost was $24 for two hours in the afternoon.

Perhaps the prolific number of love hotels and their high rate of occupancy day and night tells us a little about the sexual attitudes of the Japanese. Love hotels provide the privacy many couples cannot have together since housing is at a premium and therefore crowded. Even though the hostess at the registration desk and the hotel employees are very discreet, we never had the sense that guests were having a forbidden, secret tryst. Couples walked in openly and waited to be served as if they were in a restaurant. There was no apparent discomfort or effort to conceal one's identity even when many couples were in the lobby at the same time.

That much cultural ease with the love hotels suggests that they come out of a long history or tradition in Japan. We would be interested to learn more about that. ■

Erotic nirvana for the musically inclined, this tastefully appointed room is in Tokyo's *Meguro Emperor* hotel.

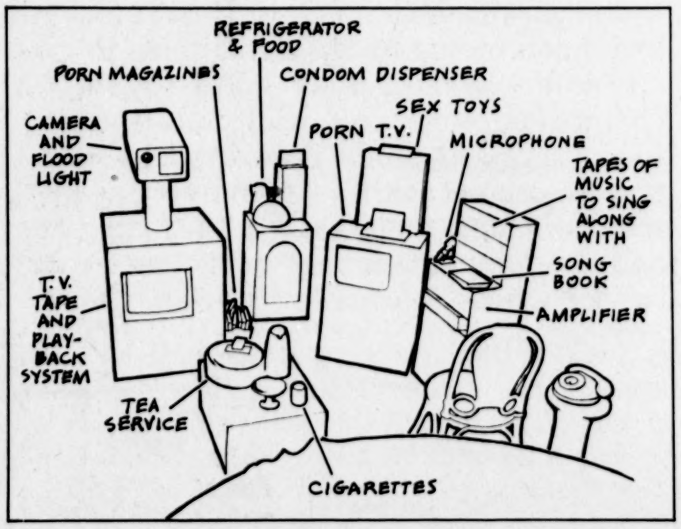

DIAGRAM BY DON RYAN

The Truth about English

You can **hear** *good writing. That's the surest test of it. It sounds like somebody telling the truth. Bad writing looks like somebody showing off. Pinckert's best and most radical service is teaching you how to punctuate by sound rather than by rule. You listen to your writing, and so does the reader. The rest of the book is a cheerful tour of all the ways to show off in writing. You learn how to identify each kind of lie and cut it away. What's left may well be truth.* *—Stewart Brand*
[Suggested by David H. Lull]

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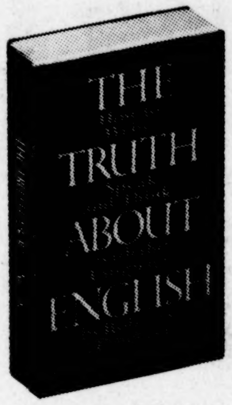
In the eye method, you're told to put commas between coordinate adjectives, that is, adjectives that are equally important. *The dog is a black, nervous poodle.* In order to use the eye method you have to decide how important each adjective is. In the ear method, I tell you to put a comma wherever there's a comma sound. *He was a dirty old man.* But, *he was a dirty, wealthy old man.* Did you hear the comma?

•

When you condense you may be shocked at how much you can get rid of. Paragraphs can be reduced to sentences, sentences to clauses, clauses to phrases, phrases to words, and words can be thrown away. What's left? Only what's alive. Prose should be lean and muscular, though not be so compact it's unnatural, so musclebound it can't move. Boiling the writing down can be carried too far, and what's left can lose its flavor like the prose in condensed books. But doing too much cutting is seldom a danger. Skinny sentences are hardly so common as fat.

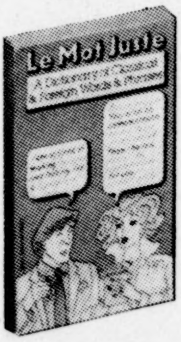
The Truth about English
(How to Write, Speak, and Think with the Language)
Robert C. Pinckert
1981; 244 pp.
$7.35
postpaid from:
Prentice-Hall
Box 500
Englewood Cliffs, NJ
07632



Le Mot Juste

Smack in the middle of writing a paragraph once I needed to use the phrase "Sturm und Drang" — nothing else would do — and I couldn't spell it **or** *find it in any of my dictionaries, not even my trusty* **Oxford English Dictionary**. *I will have that problem no more. A $2.95 paperback contains just about all the commonly used phrases from foreign languages that you're likely to need when you're writing or reading material for a general audience. It covers classical languages, French, German, Italian, Spanish, and a grabbag of words from assorted other languages. One disadvantage of not having a formal education is not knowing the pronunciation of foreign terms that crop up in English conversation; because this has pronunciation guides for each language, it can help. It's well designed typographically, easy to use, and fun.* *—Janet Hess*

Le Mot Juste
(A Dictionary of Classical and Foreign Words and Phrases)
Kogan Page, Ltd., and
John Buchanan Brown
1981; 176 pp.
$3.95
postpaid from:
Random House
400 Hahn Road
Westminster, MD 21157
or Whole Earth
Bookstore



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Sturm und Drang. *(SHTURHM unt DRAHNG)* storm and struggle; emotional turmoil (used to describe the early Romantic period in German literature)

Ubermensch. *(OO-ber-mensh)* superman

verboten. *(fehr-BOH-ten)* forbidden, prohibited, illegal

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nom de plume. *(NOM de PLOOM) lit:* pen name; pseudonym (of a writer)

nostalgie de la boue. *(nos-tahl-gee de lah BOO) lit:* longing for the mud; yearning for the low life

nouveau riche. *(NOU-voh REESH)* person of newly acquired wealth and status (usually used pejoratively)

Musical Heritage Society

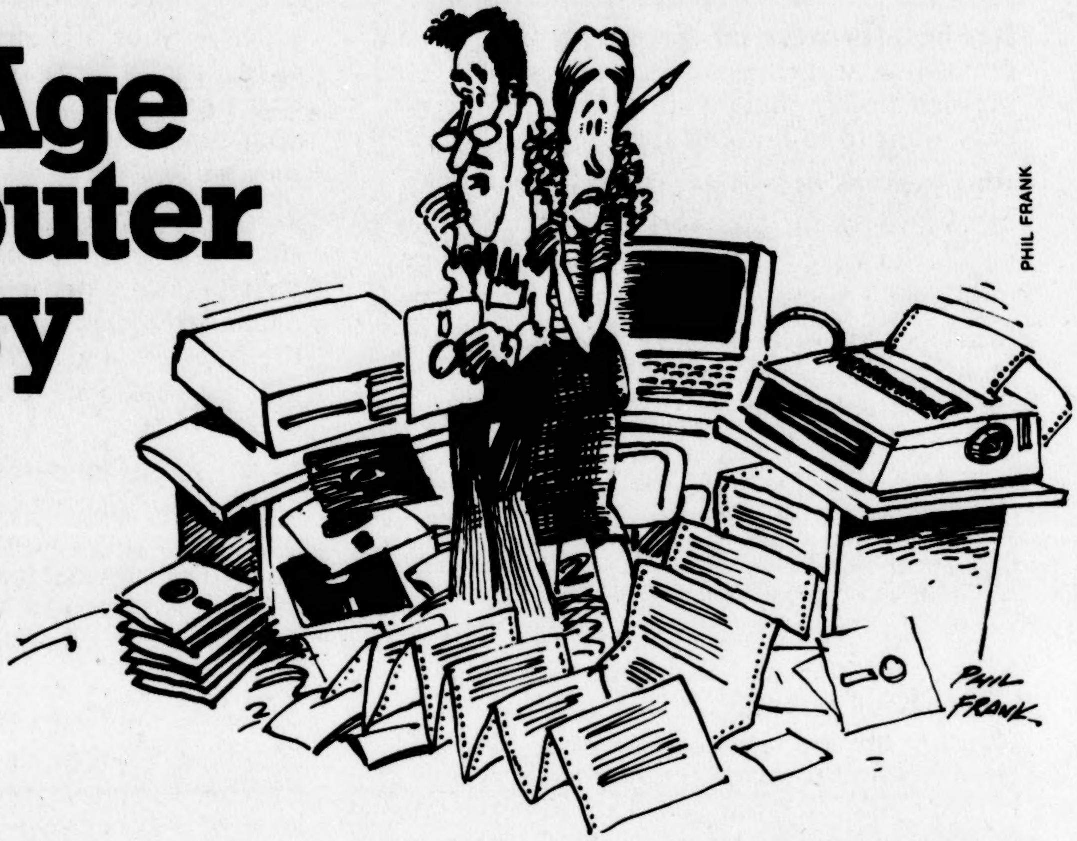
The Musical Heritage Society offers more than 3000 classical records and tapes by mail. Membership is free. Members receive a monthly magazine listing old and new releases as well as articles on related topics. The monthly selection is shipped automatically unless the member returns a card from the magazine. Currently MHS charges members $4.95 per disc or cassette and $1.95 shipping and handling per order. The nonmember price is $7.75 per disc or cassette.

I've been a member of MHS for several years and I've found their albums and cassettes to be of very high quality; in fact, I won't buy prerecorded cassettes from anyone else. What one doesn't get from MHS are flashy album graphics, "name" conductors and "name" orchestras. Many of the recordings are licensed from European record companies.

I live near several excellent record stores but unless I just have to have a recording by a "big name" I prefer buying from MHS. I would recommend them to anyone who doesn't live near a good record store but would like to build a good classical record library.
—Jay D. Eckert
[Suggested by Michael Triplett]

Musical Heritage Society
Catalog
("Musical Heritage Review")
$1
postpaid from:
Musical Heritage Society
Musical Heritage
Society Building
14 Park Road
Tinton Falls, NJ 07724

New Age Computer Heresy



Why not to computerize your worthy cause

by Pat Wagner

IN NEW YORK, A NATIONAL alternative press organization develops an on-line computer system for their members. Never mind that the hardware is too small and the software is too slow. Never mind that 90 percent of the member newspapers are too poor to send exchange copies first class or to pay their staff a living wage. They are still told to buy thousands of dollars of computer equipment. Never mind that the operator of the main test site does not know enough about basic business economics to warn potential customers of the true cost of the system. Never mind, because now they have a computer and it's gonna save them.

The psychology of the current hysteria over computers, particularly among small organizations, fascinates me. If you talk to folks who *really* work with computers — who work with systems of all sizes, who have seen many systems fail, who have had the responsibility over many years of designing, programming and managing computers — the religious fervor is almost nonexistent. These folks know that it takes years to get an operation working. They know computer costs tend to *increase* over the years, not *decrease*. They know about the alienation of staff when the computer arrives. They know, in effect, that Murphy's Law and all of its permutations were invented to describe working with computers. (Of course, even Murphy's laws have bugs.)

However, talk to the relatively inexperienced students of small computers who convince friendly community groups that to serve clients better means creating on-line databases. To the hackers who are willing to spend 14 hours a day getting a machine to do the work that used to take a human being three hours a week. To the board members who sign loans on their houses for computer equipment for organizations that can't even pay their staff people. These folks will tell you, starry-eyed, that computers will save time and money. The computer will make them more efficient. The computer will solve their problems. The computer's gonna save them.

My horrible suspicion is that computers have become icons for a generation unable to appreciate how to get things done. By this I mean a cultural fascination with philosophical hoo-haa and an aversion to long boring years of detail work and repetition needed to put the hoo-haa into the world. It is true that a computer can help with all the boring detail work. However, it is only a tool.

For example, most folks who contact us about

Pat Wagner cofounded and coadministers (with Leif Smith) the first working local information exchange business, the Denver Open Network (profiled in the Spring '81 CQ*). I hope it's obvious that most of us here think computers are basically Good Tools; but after seeing greed and careless enthusiasm (mine, too) rampant at the recent Eighth West Coast Computer Faire, I'm glad to see a calm caveat like this one. Pat says all the examples here are true; I can think of several others that I've heard about in the last year.* —*Art Kleiner* starting a network project do not want to talk about human beings and money and the problems of running a small business. They only want to talk about the computer.

When we try to explain that the computer is no more a focus for our work than a typewriter or pencil, they are offended. They think we are hiding something.

When we tell them it took us years to break even financially and to build our credibility in the community and we know no shortcuts, they are bored.

But this is what our project is really and truly about, and the best projects I know and admire are really and truly about doing the silly work for years, day in and day out.

I was fortunate enough to have trained in the field of printing with older men who really cared about their work. They spent years teaching me to be patient (a lesson I am still learning) and to love the time it takes to become good at what you do. They also taught me that the tricks work most of the time, but what counts always is the preparation for the time the tricks don't work.

Computers must appear as a wonderful shortcut for many people. There is a difference, however, between shortening the time it takes to get out an accounting report and building an organization that can afford to pay its bills. The computer is a tool, like a hammer or a new chemical or a set of instructions. But you have to know what you are building.

There is a wonderful story circulating among computer managers, a technological version of the stone-soup fable. A company decided to buy a computer system to automate its bookkeeping and records systems. The consultant who was hired to choose and install the system decided to do a really good job of preparing the company for the computer. He had the company, in effect, put its ship in order.

Filing systems were redesigned, the whole financial department was overhauled, the physical environment was upgraded for better productivity and worker satisfaction. Everything was done to put the place in order for the great day. At the end of the cleanup period, the consultant pulled out a set of figures and showed a surprised and grateful management that the changes in the business had produced the same improvements that the computer was supposed to bring — however, it was better management and human relations, not the computer, that improved things.

They never did install the computer.

The following truths about computers are known to all professional computer folk:

1. The system — that includes hardware and software — will always cost at least twice as much as your highest estimate. Software changes on a large system often exceed the total cost of the original system. Computer costs for your organization will rise for two years — then they will go up.

2. The planning and installation of even the smallest micro will magnify all the problems your organization or project has. The computer's main immediate impact is to dry up the financial and emotional resources that allowed you to survive beyond the hand-to-mouth stage.

3. If you did everything right, you will not notice any real cost savings in your budget for two years. This will most likely be reflected in staff hiring freezes (computers do not cut staff, because you need to hire people to run the damn thing or to replace the people who left in a huff).

4. Yes, computer hardware and software costs are going down at an amazing rate. However, when you commit yourself to the purchase or lease of a system, you have taken yourself out of the game, so to speak. You will invest in system packages only to find a 13-year-old kid in Kenosha, Wisconsin, just came out with a system design half the cost of yours and twice as nice.

5. Despite the computer, you will still have all the same financial and management problems you did before you had a computer.

6. If you promote your project as a computer project folks will sign up just because you are a computer project, then be very disappointed when you are not magically able to solve all their problems. You will find thousands of people wanting to know why the computer did not find them good sex, cure their bad temper or end world hunger. If you point out that these are tasks for human beings to accomplish, they won't believe you.

To cap off the above tirade, I would like to make a very rash statement. If you disagree, I don't blame you, but right now, I really believe this to be true. I have never seen a project that was really doing a good job that needed a computer to improve the basic worth of the project and I never saw a computer installation succeed in a project unless the project already had its act together. This goes for big business and small non-profit organizations, Marxist neighborhood groups and conservative oil companies. The wise among us no longer believe that someone on a white horse will save us; it will make small difference that the horse is now computerized.

On the other hand . . . .

I am fortunate to share the use of a well-maintained sophisticated machine with lovely software. I rarely worry if the machine will be running; I have lost perhaps four pages of data in five years. However, we are talking about $500,000 worth of hardware and software and an in-house designer who spends an average of 40 hours a week — mostly weekends and evenings — on a complex of dozens of programs. The system is my secretary for many tasks, but the actual cost is the same as a well-paid professional secretary in Denver.

I am not an antitechnology person who hates computers; much of my time is spent in front of a terminal and I enjoy it. However, only 10 percent of the real work I do is computer work — I still mostly pretend to be a human being and talk on the phone, chat in the office, etc. I do love our machine, but I am always aware of the price of using it. I would not want to work without it after all these years, but I could, and will, if need be.

If you would like to buy or lease some kind of system for your project, be it profit or nonprofit, the following questions might prove useful. For those of us who love tinkering with machines, and I certainly include myself in that category, the sheer joy of having an electronic playground for our minds will lovingly blur the hard fact that we have potatoes to hoe or a company to run. So make sure you have someone of the team clear-eyed enough to point out the dangers.

If this all seems a little hard-edged, by the way, it comes from seeing dozens of projects pushed over the brink by their involvement with computers. It is less stressful to think about these things before you have to, than after they have become a matter of life and death for your organization.

HARD QUESTIONS TO ASK YOURSELF:

- Who on the staff will have the prime responsibility for seeing to the computer? Does this person have a minimum of 25 hours per week to devote to this?
- Where will the computer go? Is there an environment where the temperature is controlled, there is little dust or smoking, and the relative humidity can be adjusted?
- Do we have one year to basically get adjusted to the machine and two years before we expect real money savings?
- If the computer does not work out, do we have a way to bow out gracefully after six months or a year?

HARD QUESTIONS FOR THE COMPUTER SALESPEOPLE

(Interview at least three companies):

- What is wrong with this machine?
- What are the names of three current customers who are using the machine for the same thing I am whom I can talk to?
- What is the maintenance contract?
- Who fixes your machines? Where are they fixed?
- How did you come to sell computers?
- Do you have any experience setting up the specific kind of programs I need?
- Who is available to talk to on weekends and evenings about the machine?
- Do you have books, literature, classes I can use?
- Is there a users group for this machine?
- What is the average turnover for this model?
- How well does it interface with other equipment?
- Can I trade up? Can I trade in? Will you sell my machine if I want to get rid of it?
- Who can help me adapt software? How much will it cost?

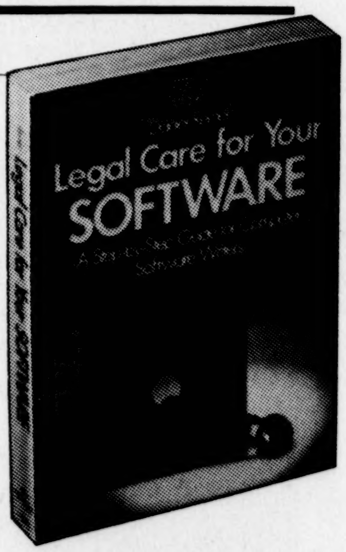
OTHER ISSUES

- What is the future of our project? Where do we expect to be five years from now?
- Who in my city is also working on the same ideas — how are they doing?
- What is the worst-case scenario for having this computer? Can we afford it?
- What do we do when the computer doesn't run? Do we have back-ups?
- Who is responsible for the success of our project? How are they liable for the success?
- Can we get along for another year without a computer?
- Are there other means to accomplish the same goals? ■

Legal Care for Your Software

Every time I walk into a working programmer's office, I see this book. Copyright, patent, trademark, and licensing laws are Byzantine anyway, but when applied to computer software they're probably the best argument around for staying out of the business and taking up something simple, like molecular biology. I guess if you can understand microcoding you can understand the legal constraints on software, but you'll still need the clear and pleasantly written explanations in this book. It's a book you **won't** *need if you're merely a software user, unless you want a very detailed understanding of some of the more complex legal/political issues of the Information Age.*

—Art Kleiner



Legal Care for Your Software
Daniel Remer
1982; 247 pp.
$19.95
postpaid from:
Addison-Wesley
Publishing Company
Jacob Way
Reading, MA 01867
or Whole Earth
Bookstore

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Contracts

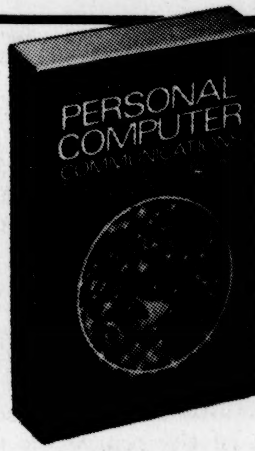
Sooner or later just about everyone involved with software will have a contract problem. It may be as simple as a late royalty payment or as complicated as a question over whether an ambigiously worded license agreement gives the publisher the right to market software for a new computer.

Suppose, for example, that a license read "Firstware has the right to market JunkMail on the Nutrino Computer." A year later Nutrino announces the Mutrino, a new machine jointly produced with an English computer firm. Can Firstware sell JunkMail for the Mutrino even though it did not exist at the time of the agreement? Your guess is as good as mine. A well-drafted contract should address the issue of machines that do not yet exist, but no one can write a perfect contract every time.

The Complete Handbook of Personal Computer Communications

The Complete Handbook of Personal Computer Communications
(Everything You Need to Go Online with the World)
Alfred Glossbrenner
1983; 325 pp.
$14.95
postpaid from:
St. Martin's Press
175 Fifth Avenue
New York, NY 10010

or Whole Earth Bookstore



Personally, I think communicating with other people is the most important use computers have. But there is so much nobody tells you in computer networking unless you know what to ask — how to choose and configure communications software for your computer, how to compare networks, how to find the particular conference you need, how to send a mailgram directly, how to connect your computer to someone else's typesetting equipment or directly to another computer. This is the first guide of its kind. I don't know if it will ultimately be the best, but it's good. There are a couple of important subjects left out — like an explanation of BREAK, possibly the most-often-used key in networking and too infrequently built into home computers — but in everything the book does cover it's detailed, well-written, and true. Glossbrenner's clearly been kicking around all the networks like a madman researching this thing.

—Art Kleiner
(EIES 866, Source PS0008)

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Direct-connect modems *can* be used even if no modular jack is available. You can buy a telephone extension cord with a modular plug at one end and four colored wires at the other. If you attach alligator clips to the wires, you can unscrew the mouth- and earpieces of many telephone handsets and connect the clips to the appropriate contact points. (Just follow the color scheme.) Plug the other end of the cord into the modular receptacle on your modem, and you're in business.

It's not pretty. But it works.

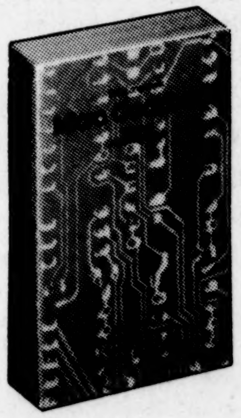
•

Almost without exception, any two microcomputers that are equipped to go online can also be directly connected to one another. Because telephone lines are not involved, no modems are required. But you *will* need a crossover or "null-modem" cable to make the connection. This makes sure that each machine's output signals go into the other's input port. If the two computers are identical makes and models, a simple connection should do the trick. But if they are made by different manufacturers or are different models from the same manufacturer, you will also need to know the "pin out" of each computer. This tells you what signals it sends and receives on what plug pins.

This sounds complicated, but it can definitely be worth doing, particularly if you are one of the growing number of businesspeople who own a *portable* computer. Making a direct connection will allow you to transfer files from a communicating word processor or computer at your office into your own machine, enabling you to work with them at home, on an airplane, or anywhere else. In addition, since no telephone connections are involved, you may be able to transfer information at a speed as high as 9600 baud.

Micro Cookbook

Micro Cookbook
(Vol. 1: Fundamentals)
Don Lancaster
1982; 376 pp.
$15.95
postpaid from:
Howard W. Sams & Company, Inc.
4300 West 62nd Street
Indianapolis, IN 46206



Don Lancaster, of the famed electronics **Cookbooks (NWEC** *p. 522) and* **The Incredible Secret Money Machine(NWEC** *p. 304), comes through again with an inviting guide to the fundamentals (not BASICs) of machine-language programming and the technical specs for microcomputers and associated devices. This is for the aspiring hacker who wishes to delve into the circuits and codes within a small computer and invent his/her own software or systems. Though I haven't personally used Lancaster's material, I've heard from people who have, and they say the book is solid (though incomplete; future volumes may remedy this). I'll vouch that the book's inspiring.*

—Art Kleiner

•

Doing It: Make a list of the top ten micro programs. This list will change through time. Right now, the top programs are Visicalc and Visiplot, the Adam's adventures, Super Invaders, Sargon chess, aircraft flight simulators, other Adventures, music synthesizers, word processors, and so on.

And guess what? **Every one of the most popular and best selling computer programs today is written — at least partly — in machine language!**

This brings us to Snurdley's rule: **GOOD programs can sometimes be written in BASIC, but . . . GREAT programs demand machine language.**

As we've seen, a good combination is often a mix of machine language and a higher level language. Often you can write the program first in a high-level language, and then "fix" the slow or unsophisticated parts with suitable machine-language calls or subroutines.

All of which could bring us to this . . .

You Gotta Learn Machine Language
because it is . . .

( ) The **only** way to really learn how micros work on the gut level
( ) The **only** way to write truly great, classic, or best-selling software.
( ) The **only** way to turn the full resources of your micro loose inside a program written in a higher level language.
( ) The **fastest** way to do game motions, music, animation, business sorts, and I/O control.
( ) The **only** thing you may have room for in a small machine.
( ) A fairly **good** way to protect your programs from casual theft.

COMPUTER EPIGRAMS

by Alan J. Perlis

cartoons by Art Kleiner

1. One man's constant is another man's variable.

2. Every program is a part of some other program and rarely fits.

3. If a program manipulates a large amount of data, it does so in a small number of ways.

4. It is easier to write an incorrect program than to understand a correct one.

5. A programming language is low level when its programs require attention to the irrelevant.

6. Get into a rut early: Do the same processes the same way. Accumulate idioms. Standardize. The only difference(!) between Shakespeare and you was the size of his idiom list — not the size of his vocabulary.

7. Recursion is the root of computation since it trades description for time.

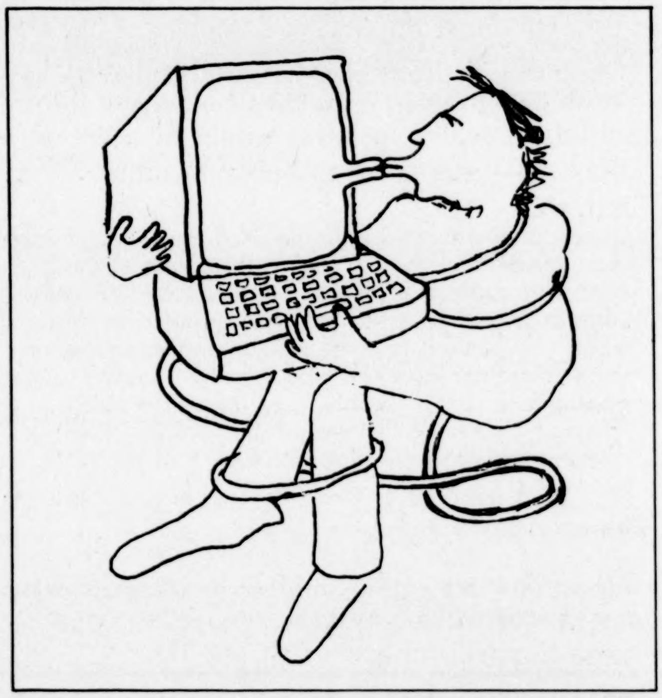
8. Everything should be built top-down, except the first time.

9. Every program has (at least) two purposes: the one for which it was written and another for which it wasn't.

10. If a listener nods his head when you're explaining your program, wake him up.

11. A language that doesn't affect the way you think about programming is not worth knowing.

12. Optimization hinders evolution.



13. To understand a program you must become both the machine and the program.

14. One can only display complex information in the mind. Like seeing, movement or flow or alteration of view is more important that the static picture, no matter how lovely.

15. There will always be things we wish to say in our programs that in all known languages can only be said poorly.

16. Once you understand how to write a program get someone else to write it.

"Computer Epigrams" is a list that Alan Perlis distributes to his students at Yale Unversity. I made this copy from Special Interest Group in Programming Languages (SIGPLAN) Notices in August of 1982. **SIGPLAN Notices** *is an unrefereed technical journal published by the Association for Computer Machinery.*

Alan Perlis is a computer science pioneer who works in the area of programming languages. The epigrams are humorous, wise, and aimed at the beginning or practicing programmer. More to the point, though, they reflect a deeply human view of the programming process. In the current rush of "computer literacy" and home-computer mass marketing, we tend to forget the fundamental tension inherent in computing: Computer programming is a very powerful new tool but completely an expression of its practitioners. *—Jeffrey Bonar*

I chose 45 out of the list of 130 epigrams. The scope of these epigrams is not limited to programming; some are reminiscent of Zen koans. *—Art Kleiner*

17. Around computers it is difficult to find the correct unit of time to measure progress. Some cathedrals took a century to complete. Can you imagine the grandeur and scope of a program that would take as long?

18. Simplicity does not precede complexity, but follows it.

19. Everyone can be taught to sculpt: Michelangelo would have had to be taught how not to. So it is with the great programmers.

20. The most important computer is the one that rages in our skulls and ever seeks that satisfactory external emulator. The standardization of real computers would be a disaster — and so it probably wouldn't happen.

21. Re graphics: A picture is worth 10K words — but only those to describe the picture. Hardly any sets of 10K words can be adequately described with pictures.

22. Some programming languages manage to absorb change but withstand progress.

23. Like punning, programming is a play on words.

24. When we understand knowledge-based systems, it will be as before — except our fingertips will have been singed.

25. Bringing computers into the home won't change either one, but may revitalize the corner saloon.

26. Software is under a constant tension. Being symbolic, it is arbitrarily perfectible; but also it is arbitrarily changeable.

27. It is easier to change the specification to fit the program than vice versa.

28. Fools ignore complexity. Pragmatists suffer it. Some can avoid it. Geniuses remove it.

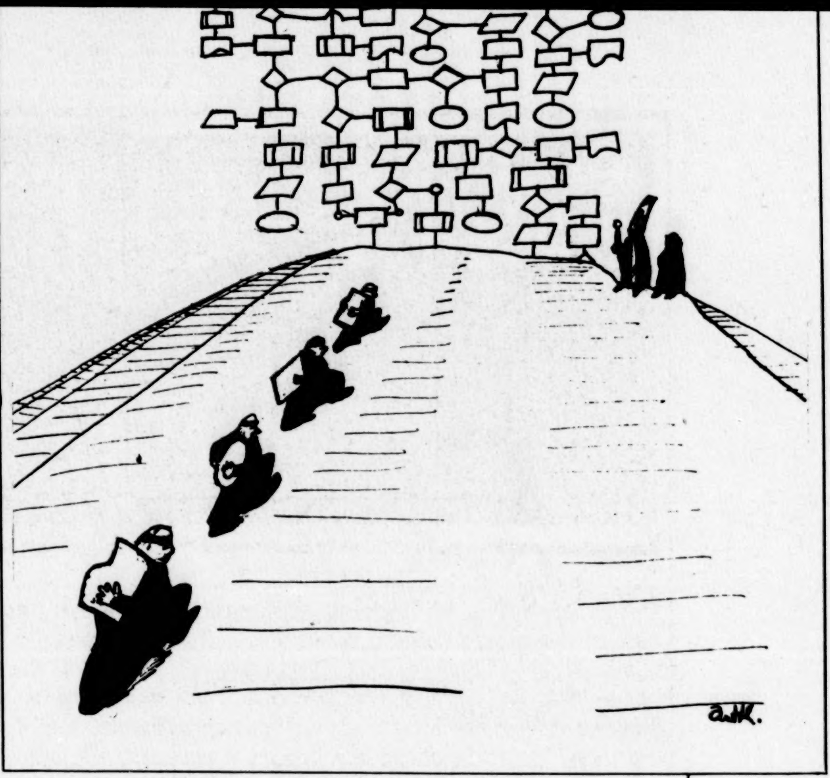
29. In programming, as in everything else, to be in error is to be reborn.

30. When we write programs that "learn," it turns out we do and they don't.

31. Often it is means that justify ends: Goals advance technique and technique survives even when goal structures crumble.

32. Make no mistake about it: Computers process numbers — not symbols. We measure our understanding (and control) by the extent to which we can arithmetize an activity.

33. Is it possible that software is not like anything else, that it is meant to be discarded, that the whole point is to always see it as soap bubble?



34. Because of its vitality, the computing field is always in desperate need of new cliches: Banality soothes our nerves.

35. A year spent in artificial intelligence is enough to make one believe in God.

36. Prolonged contact with the computer turns mathematicians into clerks and vice versa.

37. In computing, turning the obvious into the useful is a living definition of the word frustration.

38. What is the difference between a Turing machine and the modern computer? It's the same as that between Hillary's ascent of Everest and the establishment of a Hilton hotel on its peak.

39. When someone says, "I want a programming language in which I need only say what I wish done," give him a lollipop.

40. Computers don't introduce order anywhere near as much as they expose opportunities.

41. Computer science is embarassed by the computer.

42. Within a computer natural language is unnatural.

43. Most people find the concept of programming obvious but the doing impossible.

44. You think you know when you learn, are more sure when you can write, even more when you can teach, but certain when you can program.

45. It goes against the grain of modern education to teach children to program. What fun is there in making plans, acquiring discipline in organizing thoughts, devoting attention to detail, and learning to be self-critical? ■

I'M AFRAID YOUR DISEASE IS TERMINAL
©L.Shoemaker '83

User's Guide
(To CP/M Systems
and Software)
Tony Bove and
Cheryl Rhodes, Editors
$18 /year (6 issues)
from:
User's Guide
Box 3050
Stanford, CA 94305

User's Guide
TO CP/M
SYSTEMS & SOFTWARE

User's Guide

*This bimonthly gives ongoing explanations of the ins and outs of the most common operating system for small computers — CP/M — and some common programs that run with it. My only reservation about the magazine is that there are **so** many popular word processors, for instance, that any particular program covered will leave a lot of people out. But if you have CP/M on your system there will be material in every issue you can use. It's particularly good on explaining the "free" public domain programs like Modem7 that you can download to your own disks from the phone. (You won't find a clear explanation of how to use Modem7 in any other publication.) **User's Guide** also seems to be a good link to the community of CP/M pioneers who write and disseminate much of this free software. Partly because of their thorough research in this magazine, we hired editors Tony Bove and Cheryl Rhodes to help research the **Whole Earth Software Catalog** (see announcement on p. 110).*

—Art Kleiner

•

Across the world, day and night, computer systems with blinking modems are listening to telephone lines and answering phone calls.

The systems are called RCPM (Remote CP/M) systems. A "CBBS" is one that also has a computerized bulletin board. In addition to bulletin board messaging, RCPM systems offer software *downloading*. The term "downloading" refers to the direction of the data: from the system "down" to you. "Uploading" is also possible with these system — you can send programs you've written "up" to the RCPM for general distribution.

The systems are owned and operated by volunteers who call themselves *sysops*. They provide a valuable public service, cataloging public domain software and maintaining expensive equipment that lets you call in and receive software without any charges or hassles. Don't call sysops on their home numbers — they are *not* out there to serve you, but they are graciously providing a call-in service you can learn to use.

Fundamentals of Interactive Computer Graphics

For those who dream of flying not as an airplane flies but as a bird flies, or dream of trekking across alien landscapes, here at last is an exhaustive prescription for making the visual dimension of these dreams concrete.

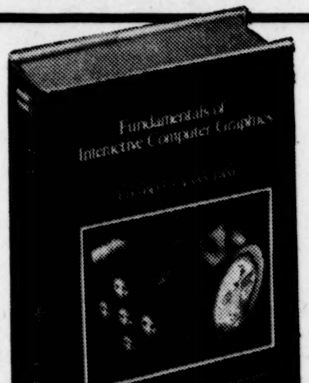
*Unlike Newman and Sproull's **Principles of Interactive Computer Graphics** (**NWEC** p. 538) which tantalizingly sketched out the techniques for generating realistic visual images from computer models, **Fundamentals** actually shows how to do it. Hardware, software techniques, actual code (in PASCAL) — it's all presented with an unusual and refreshing concern for convenient, intuitive user controls (currently fashionable buzz phrase: "human factors engineering").*

*Foley and Van Dam have included some fascinating color reproductions of computer-generated images — but not nearly enough for a genuine addict. While the Newman and Sproull images tend toward pictorial realism, Foley and Van Dam are more adventurous and eclectic in their selection. Along with the usual military aircraft-training simulator images (just a little contribution from the kindly elves who sponsored the development of computer graphics technology) are an X-wing spacecraft a la **Star Wars**, one haunting mountain view, and the face of a baboon projected onto various geometrical surfaces (a vase with baboon faces on the inside and outside, for example).*

You can get a good long look at one state-of-the-art application of these techniques in the NASA Jet Propulsion Laboratory documentary on the Voyager Saturn fly-by. This movie includes several minutes of computer simulated outer planet fly-bys.

—Ken Crossen

Fundamentals of Interactive Computer Graphics
J.D. Foley and
A. Van Dam
1982; 674 pp.
$34.95
postpaid from:
Addison-Wesley
Publishing Company
Jacob Way
Reading, MA 01867



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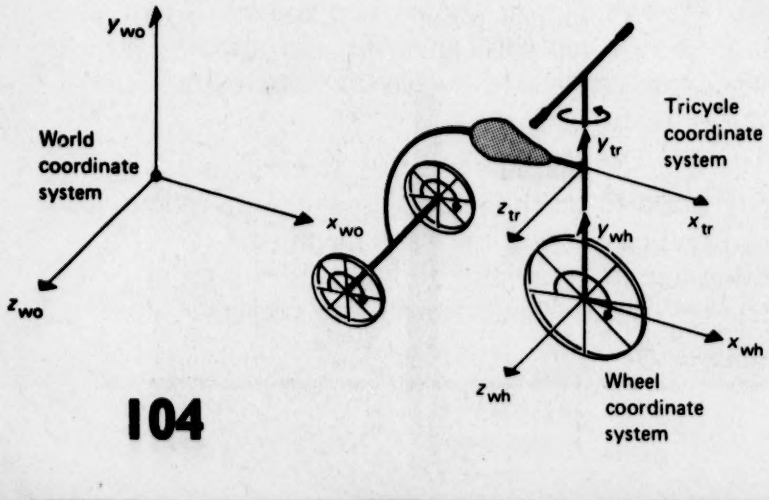


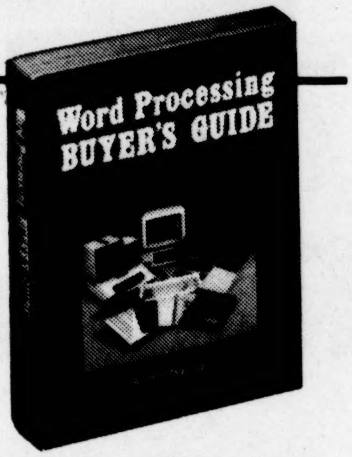
***Stylized tricycle with three coordinate systems.** As the bike moves forward, the front wheel rotates about the z axis of the wheel coordinate system, while simultaneously the wheel and tricycle coordinate systems move relative to the world coordinate system. The wheel and tricycle coordinate systems are related to the world coordinate system by time-varying translations in x and y plus a rotation about y. The tricycle and wheel coordinate systems are related to each other by a time-varying rotation about y as the handlebars are turned.*

Word Processing Buyer's Guide

Word processing — writing and editing with computers — deserves most of the hype it's had recently. It doesn't just make writing easier and faster, it makes writing feel better. But most introductory guides to buying a word processor are either patronizingly glib, overly technical, or so unwilling to go out on a limb and recommend specific choices that there's nothing left but to tell us what we already know: that word processing is nice. The best way to choose a word-processing computer is to have unlimited time and cash, buy every system that you hear good things about, spend a month with each, and then choose the one that best fits your writing moods. If that's impossible, and your choice isn't made for you by circumstance, I'd use the **Word Processing Buyer's Guide**.

This book is impeccable, except that it's already dated — I guess because of a longer printing time than its competitors. Thus, some recent programs aren't covered, but there's a **Consumer Reports**-*quality rating sheet that will really help judge any new program that comes along. The writing's clear, concise, gossipy, and full of thorough details on topics like the health hazards of screens and alternatives to Qwerty keyboards. Arthur Naiman excels at describing an esoteric feature in terms of how using it changes your life. Though I arrogantly pride myself on having heard all this before, he uncovered a lot of material that was news to me. And though I'm usually bored by computer books after the first two pages, I read this all the way through in one sitting. If you're a writer wondering how to bring these machines into your life, this and maybe the* **Word Processing News** *will be all you need.* —*Art Kleiner*

Word Processing Buyer's Guide
Arthur Naiman
1982; 325 pp.
$15.95
postpaid from:
McGraw-Hill
Princeton Road
Hightstown, NJ 08520
or Whole Earth
Bookstore



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Some terminals let you display text in **reverse video** (dark letters on a light background, instead of light letters on a dark background) or at one or more levels of **reduced intensity** (i.e., dimmer). Both of these are useful for **highlighting** text.

Some systems — like the Xerox Star and the CPT 8100 — normally operate in reverse video. I haven't seen any studies on this, but to my mind, it's a really good idea for at least two reasons: a light background picks up less glare, and after a lifetime of looking at black ink on white paper, looking at dark letters on a light screen is obviously going to take less adjustment and cause less trauma than learning to look at light letters on a dark screen.

(I've recently switched over to dark letters on a light screen and I *much* prefer it.)

•

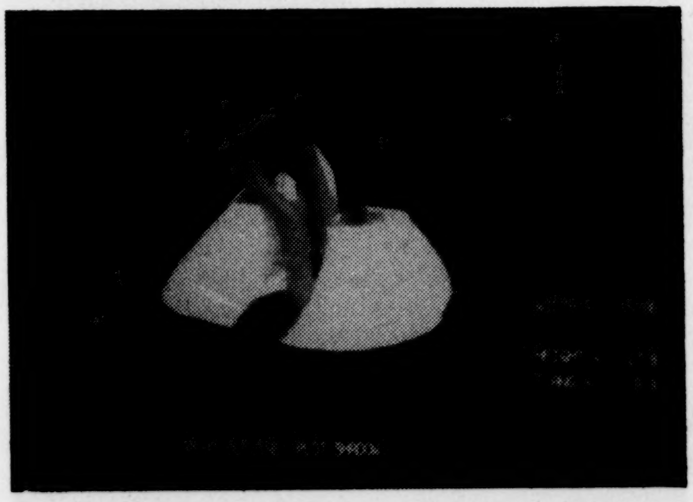
There should be no **dangerous key** — one that can result in the loss of text all by itself — anywhere on a keyboard, and *certainly* not in a place where it's likely to be hit accidentally. Apple II's are famous (or infamous) for their reset buttons, which make it way too easy to lose your entire workfile.

Reset buttons — which put a machine back to where it was when you turned it on, with the programs or text files you loaded into it erased — either should be located on the computer box itself, some distance from the keyboard, or — if the keyboard and computer are one unit — should require at least two, and ideally three, keystrokes to be activated.

•

"Computer graphics" is the creation, storage, and manipulation of models of objects and their pictures via computer. "Interactive computer graphics" is the important case in which a user dynamically controls the pictures' content, format, size, or colors on a display surface by means of interaction devices such as a keyboard, lever, or joystick.

Display of esophagus, spinal cord, and lung surfaces in the upper thoracic region (reconstruction based on five cross-sectional image plates).



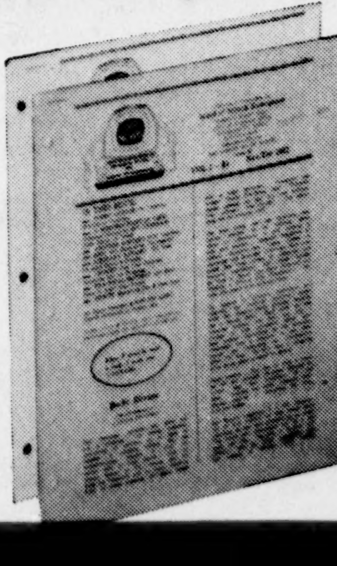
Word Processing News

I like this competent and slightly wacky gossip sheet for professional (and aspiring) writers who use word processors and/or write about computers. As newsletters sometimes do, it's woven its readership into a community — through classifieds, a lot of reader feedback, and what Editor Barbara Elman calls "tidbits" — news of everything from conferences to writing opportunities. Each issue is better than the last, and she's starting to keep up with new word-processing programs, machines, and other resources. Since it comes out of Hollywood, there's a lot of material on scriptwriting, which has its own peculiar format demands that computers really help solve. —*Art Kleiner*

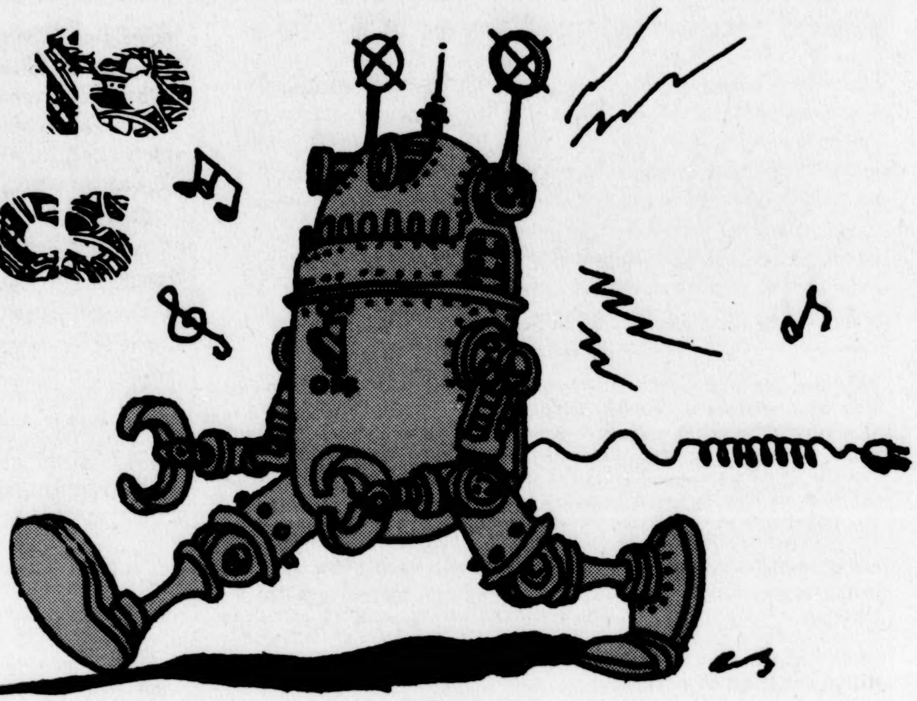
•

For screenwriters anguished by the complexities of producing script format with computer functions, a program has *finally* arrived to save the day! *Scriptor* is a text *formatter* that takes your CP/M processed words (from any WP program) and rearranges them to fit your specifications of action and dialogue margins, page and scene numbers (even A & B pages and scenes), page length (automatic or interactive endings) and page/dialogue "continueds" in the proper places and styles. Designed by Steve Greenfield (Screenplay Systems, 211 E. Olive Ave., #203, Burbank, CA 91502), a screenwriter *and* computer programmer in one person, *Scriptor* does it all and does it *right* for under $500.

Word Processing News
Barbara Elman, Editor
$24 /year (6 issues)
from:
Word of Mouth
Enterprises
211 East Olive Street
Suite 210
Burbank, CA 91501



Access to Robotics



Cartoon and Lettering Detail by HARRY S. ROBINS

by Maris Ambats

Although robots have been popular in science fiction and movies for some time, we seem to have finally arrived at the threshold of the birth of real robots. Who is going to build these robots? You are. Robotics today is at a very early stage, somewhat like the early days of aviation or radio, and the independent experimenter can make substantial original contributions without a large budget or elaborate equipment.

What do we mean by robots? A simple definition could be that they are mobile mechanisms with sensors (phototransistors, TV cameras, microphones, pressure-sensitive resistors, etc.) and effectors (arms, claws, grippers, tools, laser beams, etc.) to which varying degrees of on-board machine intelligence have been added. These machines can operate independently in their environment and solve problems that they encounter. This definition distinguishes them from industrial robots, which are programmed to perform specific tasks and are not usually mobile.

Many people are appalled at the thought of machines having any intelligence whatsoever and find comfort in the thought that "computers can only do exaclty what you program them to do." Unfortunately this thought has no substance to it, because you can program a computer to manipulate its environment by means of effectors and to record the successful responses in its memory and then use them to write totally new programs for itself. Consequently, the computer alters its own programs based on its experiences, and we have no way of knowing ahead of time what the new programs will turn out to be like.

As David Heiserman states in **Robot Intelligence with Experiments**: *"I have never calculated the amount of programming required for various tasks demonstrated in this book, but I'm willing to bet that at least half of it would be classified as housekeeping chores for your computer. Another major portion of the programming has to do with giving the creatures some sensory and responsive mechanisms. There is absolutely no programming devoted to telling the creature exactly what it is supposed to do under any particular set of circumstances."*

Since it is expensive and difficult to build a physical machine with microprocessors, drive motors, steering, sensors, batteries, etc., and even more difficult to modify it as you gain more knowledge of what it should be like, an easier way of developing robots is to simulate the physical machine on a computer, and then develop the software for it. This way, not only the software but the physical aspects of the machine may easily be modified to make improvements or to give the robot different functions. Then, after you are satisfied with the performance of the simulated machine, you can build a real machine embodying the same designs.

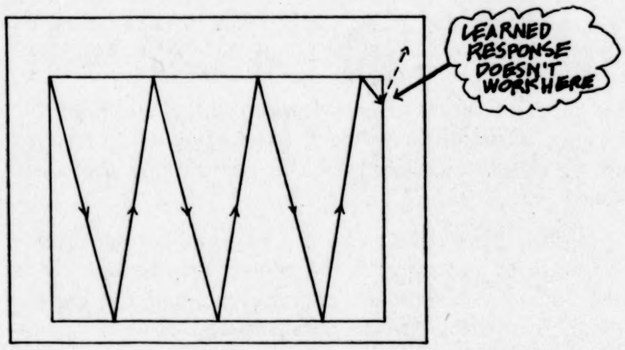
This also has the advantage that the most interesting work in robotics can be done using nothing more than a home computer. While this may sound like a complicated procedure, it isn't, and you can do it for yourself if you read Heiserman's two books (the second is **Projects in Machine Intelligence for Your Home Computer***).*

It is quite amazing how much uncharted territory there is waiting to be covered. Many of the sophisticated approaches taken in this area earlier have turned out to be dead ends, which Heiserman attributes to the early tendency to modeling biological intelligence — making artificial neuron nets, etc. For the same reason, aviation was significantly held back by the (wrongly) perceived need to model aircraft after birds, with flapping wings, etc.

Heiserman has isolated what he calls "adaptive machine intelligence" which refers to the ability of a machine to deal effectively with problems in its environment. His point is that we should study machine intelligence itself, and not get confused by trying to compare it to human intelligence. This type of confusion manifests itself in questions like "Can machines think?" or "Can they become conscious?" While these questions are philosophically interesting, and are touched on in **The**

We were receiving a lot of review books about practicing robotics, but there was no one to judge them, and I didn't want to let the subject slip by because home robotics may well change people's lives in a more long-lasting (though less immediately explosive) way than home computing. Alan Kalker (author of "Inventor's Services," **NWEC** *p. 169) recommended New Yorker Maris Ambats to us. Maris is a former designer of such electronic medical equipment as scanners. He casually dipped into robot making and found himself hooked. Home robotics doesn't just involve motors, scanners, and grippers. The central problem is teaching the machine to respond independently to whatever happens around it. It's good to see that there are experimenters writing about all the varied aspects of making robots happen.*

—Art Kleiner



This drawing shows the path taken by a BETA creature that has established a certain kind of habit pattern of motion. The pattern is one where the critter moves downward and a bit to the right. Upon making a contact with the border figure, it has learned to respond by moving upward and a bit less to the right. After that, it responds to a contact situation by moving downward and toward the right again. This regular pattern works out rather well until the creature hits the right-hand edge of the border figure. The learned response, moving upward and a bit toward the right, no longer works. The response that worked so many times before does not work under all possible situations of the kind, and the critter is forced to come up with a different kind of response.

—Robot Intelligence with Experiments

***Mind's I**, they are of no particular importance to the worker trying to create better machine intelligences (i.e. robots). Some better questions would be: "Is this machine behaving intelligently (by showing success in navigating itself, gathering data, assuring its own survival in adverse situations, etc.) in the environment in which it finds itself? Is it behaving more intelligently than another machine?"*

*In **Robot Intelligence with Experiments**, Heiserman categorizes intelligent machines according to three levels of capability. The first level, the alpha-class machine, is one that makes purely random and reflexive responses to conditions in its immediate environment.*

A beta-class machine is an alpha-class machine equipped with a memory of past experiences: "The machine exhibits alphalike behavior at first, but each time it stumbles across a response that works it remembers that response, filing it away at an address location determined by the nature of the condition that elicited the response. So when the beta creature encounters the very same condition again in the future, it looks to its previous response and tries it again."

The highest level of machine intelligence is the gamma-class machine: "A gamma-class machine is one capable of generalizing what it knows from firsthand experience to similar conditions not yet encountered in the environment. The machine works out sets of 'educated guesses' regarding the nature of possible situations in its future, studies its own past experiences, and generalizes relevant elements of those experiences, saving them for a time when they might be needed."

One of the nice things about the book is that after a few pages of introduction to general concepts, it gets down to business immmediately, and you start creating your own alpha-, beta-, and gamma-class creatures and watch them perform on your computer screen.

At first, you program simple alpha-class creatures which move randomly in straight lines, avoiding obstacles by means of random trial-and-error responses. Then scoring is added to the program, to tabulate the percentage of successful escapes, and the creatures are put into different environments to measure the effects on their perfomance.

The programming proceeds step-by-step, and ultimately the creatures are given memory of their correct responses to different situations, and the progressive (self) improvement in their performance is charted. Finally, they are given the ability to generalize their actions based on their previously successful responses. A little artificial world of mechanically intelligent creatures is created, which is then poked and pushed in order to learn something about them. A program is even given for a possible robot lawnmower, and it would be an interesting project to build a real one with improved performance.

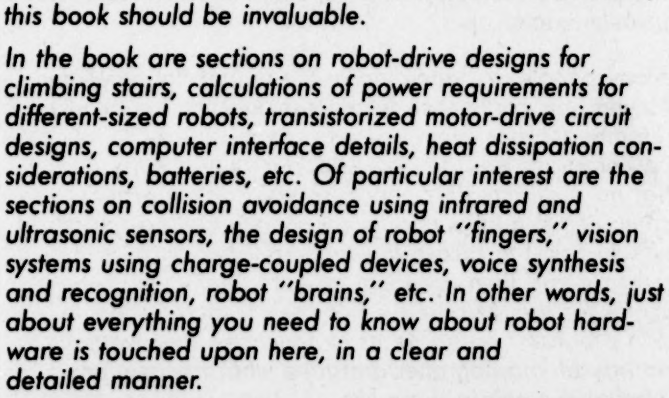
The programs, while written in Level II BASIC for the TRS-80 computer, are clearly flow charted, modular in construction and well explained, so that anyone with a modest working knowledge of BASIC should be able to adapt them to his own (different) computer. It should also be mentioned that all of these programs could be transferred to control actual machines of any size. While BASIC might not be the ultimate language for robots (machine language or FORTH might have advantages), it is certainly adequate for experimentation.

The second Heiserman book, **Projects in Machine Intelligence for Your Home Computer**, extends these concepts and adds some frightening variations. Some machine creatures are given the ability to kill other creatures; survivial strategies are allowed to be evolved by the machines, and the survival of groups of harmless creatures into which a killer creature is introduced are tabulated. All of this "comes alive" on the screen, a micro-Darwinian struggle for existence. (The programs in this book are written in Applesoft BASIC as well as Level II BASIC.)

These two books are very rich in ideas and practical solutions to the design of robots, and I would recommend them highly to anyone interested in building his own.

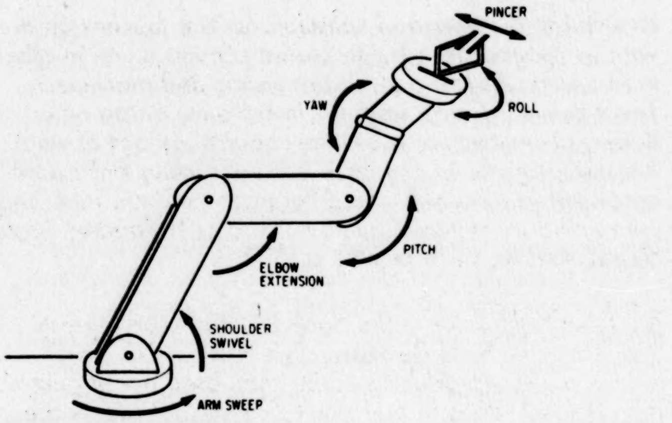
***Android Design**, by Martin Weinstein, is subtitled "Practical Approaches for Robot Builders," and it is just that, a book on robot hardware, very detailed, ingenious, and interesting. If you want to adapt the Heiserman creatures from the CRT screen to real robots, this book should be invaluable.*

In the book are sections on robot-drive designs for climbing stairs, calculations of power requirements for different-sized robots, transistorized motor-drive circuit designs, computer interface details, heat dissipation considerations, batteries, etc. Of particular interest are the sections on collision avoidance using infrared and ultrasonic sensors, the design of robot "fingers," vision systems using charge-coupled devices, voice synthesis and recognition, robot "brains," etc. In other words, just about everything you need to know about robot hardware is touched upon here, in a clear and detailed manner.



Akron experimenter Andy Filo built what we see as an arm. This intelligent eye-to-hand motion perception system corresponds to the tongue of a frog catching a fly.

—Android Design



Model of industrial-type robot "manipulator" or "end effector" showing commonly accepted industrial terminology for various "degrees of freedom" (planes of motion).
—*Android Design*

I have one philosophical difference with this book: author Weinstein states that "robots can't love." The implication is that robots will never be able to love. While this may be true if one defines love as "something that robots can't do," it is not too difficult to imagine a future robot totally devoted to his master. I believe it is much too early to put arbitrary limitations on the future capabilities of robots or computers, because these machines are creations and extensions of our own intelligences.

The next book, **Artificial Reality**, *is very difficult to describe. It is so rich in ideas that it would take a lifetime just to think out all their implications in relation to the future of robots and computers. It presents machine intelligence in the guise of "responsive environments" (something like inside-out robots) or "artificial realities," which function as games, education, and teleconferencing and provide participation in (real) reality by severely handicapped people through teleoperated effectors and sensors. There is literally no end to the flow of ideas in this book, and it is probably a prophetic blueprint of beneficial and fun uses of machine intelligence in the future.*

A*lthough* **Two Faces of Tomorrow,** *by James P. Hogan, is a science-fiction book, it is worth reading because it presents an extremely plausible account of how high levels of artificial intelligence could be developed using sophisticated computer simulation in the future.*

In the story, a computer program, the set designer, creates a number of objects, including a house and a man (Hector) in visual space in a three-dimensional display unit. Another program (FISE) determines what behavioral properties each object possesses, and how the objects interact according to the laws of nature. The running of the simulation is observed and changes in the programs are made as errors or contradictions in the behaviors are observed.

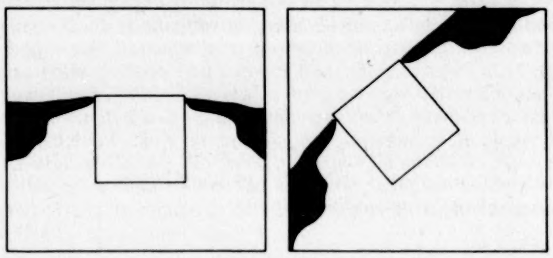
To quote from the book:

> *"That's Hector," Dyer informed her. "He lives in FISE's world along with a few other characters. We give FISE problems to solve and he attempts to solve them by manipulating Hector. Actually, FISE thinks he is Hector. Representing things visually like this is the best way of knowing what's going on inside FISE's mind. We can see straight away from the things he makes Hector do exactly what he knows and what he hasn't figured out yet. When he screws something up we straighten him out, after which he never makes the mistake again but usually goes straight on and screws something else up. As I said before, it's like having a baby that has to be told all the things that Nature normally programs it to be able to work out instinctively."*

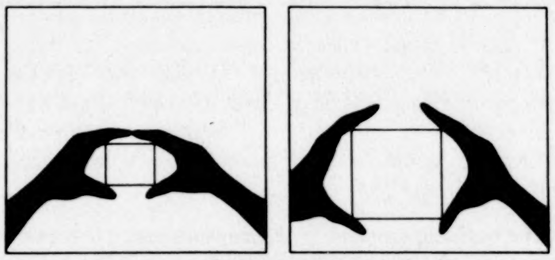
Hector does all kinds of entertaining things, such as attempting to make (simulated) fried eggs while being extremely careful not to break the (simulated) shells at the same time.

In a general sense, these are the kinds of procedures that are introduced to us in the Heiserman books. Here, however, since it is science fiction, much better equipment and programs can be conjured than are available today.

Most of **Two Faces of Tomorrow** *attempts to deal with the dilemma produced when artifical or machine intel-*

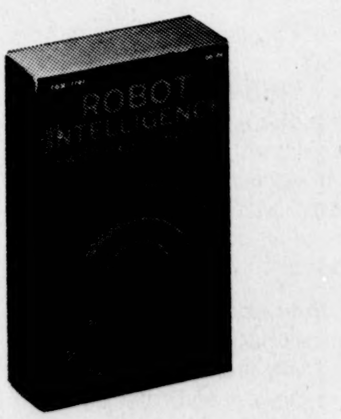


Rotating an object



Enlarging an object

Users would reach into the warehouse and select a graphic object, for instance, a box. They would then move it to the work area where they could take the archetypal box and make it into the specific box they wanted. They could put their hands flat on either side and slowly move them away, stretching the box horizontally. They could approach the box from two sides with their index fingers. Then by rotating the fingers around the box, they could indicate the orientation they wanted. At this point, they could add text fields if needed and then place the component in the design area.
—*Artificial Reality*

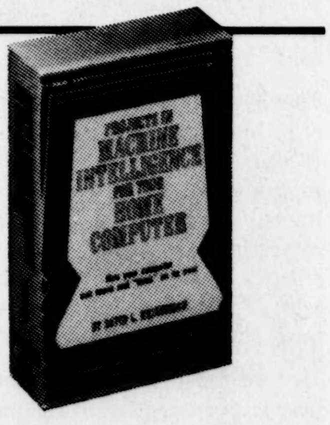


Robot Intelligence with Experiments

David L. Heiserman
1981; 308 pp.

$10.95
postpaid from:
Tab Books
Blue Ridge Summit, PA
17214

or Whole Earth
Bookstore



Projects in Machine Intelligence for Your Home Computer

David L. Heiserman
1982; 103 pp.

$10.95
postpaid from:
Tab Books
Blue Ridge Summit, PA
17214

or Whole Earth
Bookstore

ligence evolves to the point where it surpasses human intelligence and can no longer be controlled by throwing the "off" switch (having bypassed it long ago). To further disconcert the humans, the artificial-intelligence machine is evolving at an exponential rate billions of times faster than biological evolution. It starts building telescopes and other sensors to probe the universe and it finally starts building weapons and space ships to defend itself against a frightened (rightfully so) humanity.

I won't spoil the book by describing the conclusion, but I will say that I'm not at all sure it is inevitable from all the premises which lead up to it.

The story is scientifically accurate because its author is a computer professional, and the book was written with the help of Marvin Minsky of the Massachusetts Institute of Technology Artificial Intelligence Unit.

The last book, ***The Mind's I****, ponders the philosophical implications of intelligences other than our own, and especially the nature of the apparent paradoxes involved in the notion of consciousness. It touches on the various aspects of trying to create consciousness in other than human minds, e.g., in ant heaps and machines. This book is in some ways far in advance of the other books, as it does not avoid the sticky questions of what is consciousness. In any case it is engrossing because it probes the similarities and differences between man and computing machines. Coeditor Douglas Hofstadter wrote* ***Godel, Escher, Bach (NWEC*** *p. 539).*

My favorite chapter in the book is the one on ***memes*** *(coined by Richard Dawkins, a geneticist). The word means a self-reproducing entity composed not of genetic material but ideas. If you don't believe that robots are already at the stage of being able to reproduce themselves, consider the fact that their programs have already entered and taken root in David Heiserman's mind, as well as in many others. These programs and ideas have directed the minds they occupy to publish these ideas and thus propagate and evolve themselves even further. Thus, they have propagated themselves into many other minds, including yours, where they will direct you to build the actual robots.* ■

•

Initially the four creatures roam the environment, behaving in ways that characterize their underlying adaptive mechanisms. The Alphas wander around, responding to contact situations by making purely random, Alpha-like responses. The Betas start out behaving like Alpha creatures, but gradually build up a file of workable responses based on their past experiences. Whether or not the Betas have a chance to develop some clear-cut habit patterns of motion depends on how long they are allowed to survive.

It is certainly a vicious little community. All four creatures are fully capable of killing off any of the others. The program is designed so that a killed creature, whether an Alpha or Beta, remains dead. There is no resurrection feature in this case. So the population of creatures gradually diminishes until there is just one victor. And there's no telling in advance which creature will survive.

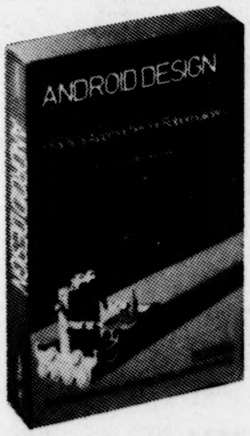
—Projects in Machine Intelligence

•

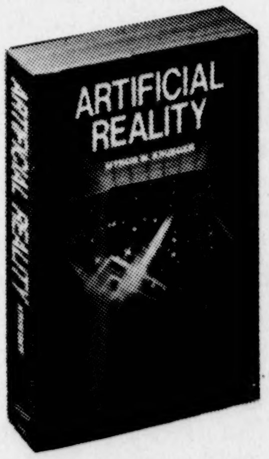
Another aspect of the particulateness of the gene is that it does not grow senile; it is no more likely to die when it is a million years old than when it is only a hundred. It leaps from body to body down the generations, manipulating body after body in its own way and for its own ends, abandoning a succession of mortal bodies before they sink in senility and death.

The genes are the immortals, or rather, they are defined as genetic entities which come close to deserving the title. We, the individual survival machines in the world, can expect to live a few more decades. But the genes in the world have an expectation of life which must be measured not in decades but in thousands and millions of years.

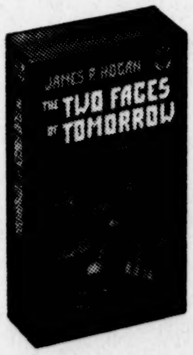
—The Mind's I



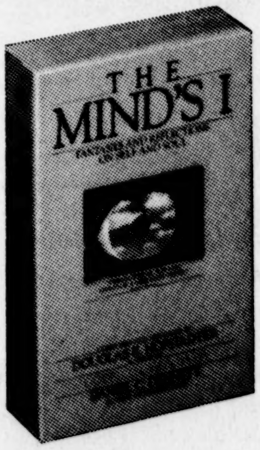
Android Design
(Practical Approaches
for Robot Builders)
Martin Bradley
Weinstein
1981; 248 pp.
$12.95
postpaid from:
Hayden Book Company
Rochelle Park, NJ
07662
or Whole Earth
Bookstore



Artificial Reality
Myron W. Krueger
1982; 312 pp.
$10.95
postpaid from:
Addison-Wesley
Publishing Company
Jacob Way
Reading, MA 01867
or Whole Earth
Bookstore



**Two Faces
of Tomorrow**
James P. Hogan
1979; 391 pp.
$3.50
postpaid from:
Ballantine Books
400 Hahn Road
Westminster, MD 21157
or Whole Earth
Bookstore



The Mind's I
(Fantasies and
Reflections on Self and
Soul)
Douglas R. Hofstadter
and Daniel C. Dennett,
Editors
1981; 501 pp.
$10.25
postpaid from:
Bantam Books
414 East Golf Road
Des Plaines, IL 60016
or Whole Earth
Bookstore

ANNOUNCING

two publications evaluating the best personal computer software, hardware, suppliers, magazines, books, accessories, services, and promising directions to watch for . . .

Whole Earth Software Review
Quarterly magazine by us, beginning late Fall (1983)
$18/year (4 issues) (single copies, $5)
Charter subscriptions $16/year
from:
Whole Earth Software Review
Box 428
Sausalito, CA 94966

Whole Earth Software Catalog
Book by us, published by Doubleday, due in 1984

IF YOU'VE GOT A PERSONAL computer, or are getting or considering getting one, so far there is no single magazine or book to meet your needs.

Your most daunting task is not learning how to use the machine, but shopping. The software field is chaotic with runaway success. There are an estimated 8600 software publishers selling 30,000-plus programs for personal computers. In a market that didn't exist a couple of years ago, software sales per year are already greater than all books, records, and films put together. Typically a user spends seven dollars for software for every one dollar of hardware expenditure. Both are major expenses, so buyers are avidly seeking guidance.

As a tool a computer is even more personal than a car. Software that is used at all intensely feels like an extension of your nervous sytem. Its habits become your habits. Not something you choose lightly. Not something you choose because someone with a completely different use pattern likes it.

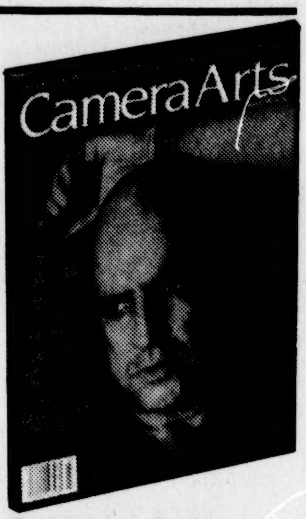
Because of the market chaos, there is a vast underground network of evaluation going on among the microcomputer user groups (a new phenomenon), the computer teleconferences, the burgeoning periodicals, the consultants, the hardware and software designers. The **Whole Earth Software Review** is in that network. We will be formalizing its gossip, doublechecking its judgments, conducting our own active research and testing, and making strong comparative product evaluations to readers. And not just of commercial products. Public domain (free) software gets reviewed alongside the commercial stuff. Our range of coverage is from the little lap computers up to local networks of business PCs linked together.

The focus is personal: what can a particular software program or machine or on-line service do for you? How will it change the way you work, the way you think, the way you spend time, the way you create, the way you perceive and affect reality?

The **Whole Earth Software Review** and **Whole Earth Software Catalog** are one process. The magazine is the book in progress. Both will coevolve with this exploding new medium, both will take a long-term as well as detailed view of it — often highly enthusiastic, sometimes highly critical or coldly practical (the stuff is great as a tool, not bad as a personal rejuvenator, poor as a religion).

The magazine carries no advertising. Other computer magazines that are heavy with ads are excellent places to shop. The **Whole Earth Software Review** is intended as a place to decide. —Stewart Brand

Italian director Federico Fellini was giving directions during the building of a set on *Fellini Satyricon* when Mary Ellen Mark photographed him. It was only the second movie she had worked on. "I was surprised when I saw this picture on a contact sheet. It was a grab shot. It's one I still like."



Camera Arts
Jim Hughes, Editor

Defunct
(Just before our deadline Ziff-Davis suddenly folded this excellent magazine and sold the subscription list to **American Photographer**.)

STINKO!
THUMBS DOWN
EH!
THUMBS UP
HATS OFF!

Content **Style** **Consequence**

Camera Arts

A magazine dedicated to quality in photography, aimed at those of us who like to look at photographs. Unlike **Zoom (NWEC** *p. 515), which showcases the admittedly amazing exotic technical feats of advertising photographers,* **Camera Arts** *has a feel for photographs that show the real worlds of, say, American paramedics or Colombian street children, the way the old* **Life** *or* **Look** *used to. But it's an aesthetic, not a photojournalistic, magazine — the articles are more often about the photographers than their subjects. Most issues have an article about the history of photography, fascinating in itself.* **Camera Arts** *is rapidly becoming the showcase magazine for its publisher, Ziff-Davis (known these days for selling* **Psychology Today** *and acquiring 14 computer magazines). It looks like it's also becoming a highly regarded (and presumably needed) artistic and journalistic conscience for photographers. The color pages don't even resemble ads too much.*

—Art Kleiner

Content **Style** **Consequence**

Arts and Architecture

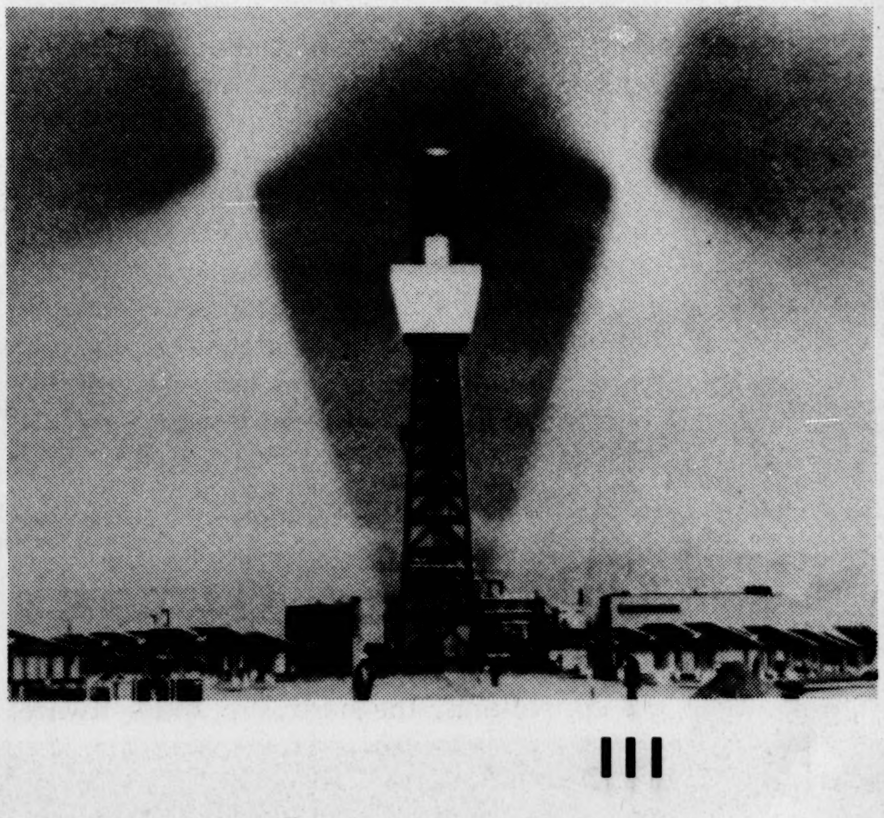
Art magazines and architecture magazines talk in a language all their own, a language obscure, ingrown, and usually focused on New York. **Arts and Architecture** *doesn't and isn't, and that is its strength. The Los Angeles-based revival of one of the most progressive architecture magazines to have existed in the United States (published from 1939 to 1967), it is regional and eclectic, covering the country's most experimental architectural turf and giving western architecture a long-needed voice on a national scale.*

A&A*'s reviews range from trendy post-modern architecture to the politics of corporate development. Articles by venerable contributors like J.B. Jackson and Esther McCoy and younger luminaries like Editor Barbara Goldstein and John Pastier (Pastier's guidemaps are of particular value) cover the gamut, from aerial landscapes and solar generating stations to the grand hotels of the National Park System and profiles of the likes of Garett Ekbo.*

In short, **Arts and Architecture** *expands the constricted domain of current architecture. Unlike its predecessor, however, it avoids advocacy. I hope that this will change, that we will see* **A&A** *shift from collage reporting to a more journalistic stance.* —Peter Calthorpe

Arts and Architecture
Barbara Goldstein,
Editor
$21 /year (4 issues)
from:
The Schindler House
835 North Kings Road
Los Angeles, CA 90069

Before beginning each day's generating cycle, Solar One's mirrors are first focused in stand-by positions at either side of the tower.



Belmond
Chapin
Ardale
Packard
Plainfield
Norton
Little Wall L.
Alexander
WRIGHT
FRANKLIN
Bristow
Clarksville
Latimer
Coulter
Galt
Geneva
Eagle Grove
Dows
Dradford
Faulkner
Kesley
Waverly
Babcock
Wall Lake
Popejoy
Burdette
Parkersburg
Finchford

Regional Cultural Magazines

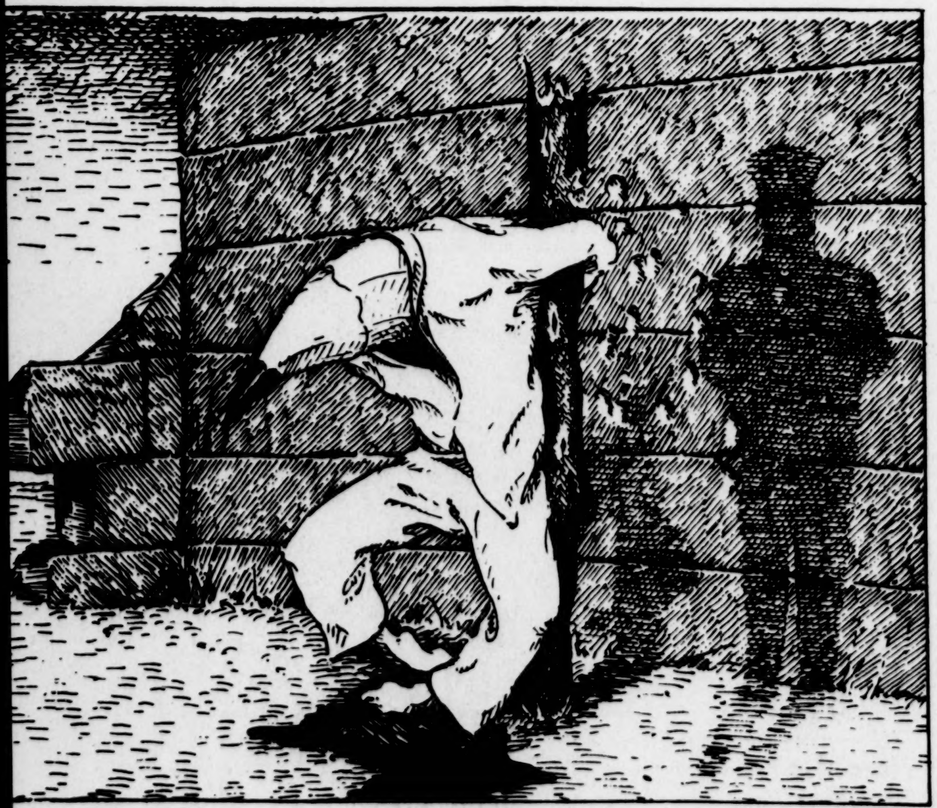
by John D. Berry

WHERE DO YOU LOOK when you want reflections on your culture from someplace close to home? If you're lucky, you'll find them in a regional cultural magazine like these.

All of these magazines have different styles, different approaches, and probably see themselves as having different purposes, but they're all responding to the same problem: the monopoly of culture, which leaves everyone who doesn't live in New York or Los Angeles feeling as though it's all really happening somewhere else. These mags start from the assumption that where you are, and what you think about it, *matters*. Some of them focus mostly on the culture and events of their own region; others take a look at the national culture, but with a perspective born of where they're looking at it from. All of them do a little of both.

One thing they seem to have in common is that they look critically at what we're doing as a community and encourage us to talk about what we *ought* to be doing. They're magazines for citizens of their regions.

The closest to home for me is the **Clinton St. Quarterly**, out of Portland, Oregon. It looks like a weekly tabloid, but it's given itself a more leisurely perspective by coming out every three months. In a recent issue it got at regional culture through an article on the ''nuclear culture'' that's grown up in the communities around the Hanford Nuclear Reservation in Eastern Washington, and at national culture by printing Congressman Ron Dellums's essay ''True Defense,'' about the federal budget. The editorials criticize the political structures of both region and nation, with an eye toward change. **Clinton St.** has just started an experiment of publishing two editions, one in Portland and one in Seattle; so far, the difference is only in the advertising, and the magazine hasn't yet found one voice to talk to the two cities.



—**Bloomsbury Review**

The most elegantly designed of the regional magazines is **The Bloomsbury Review**, from Denver. It reviews books from small presses, and from larger presses when the books seem worthwhile and aren't getting the publishers' big advertising bucks. This is one of the few places you can get critical looks at small-press books from regional publishers — all regions, not just the Southwest. The magazine's strength is in its literacy, its design, and its Southwestern outlook; its weakness (which it suffers from less than some book-review mags) is too many reviews by academics taking potshots from a safe distance.

Boston sees itself as a metropolis, but the rest of the country doesn't see it that way, and the **Boston Review** seems to take its mother city as both province and capital at the same time. The magazine looks like a slightly tighter New York Review of Books, and its range is the whole of U.S. and world culture, but it gives a strong sense of speaking from its own place. In the December issue there's an analysis of ''democratic culture'' by the editor, and a review of three regional novels about ''the other New England,'' the land of immigrants that supplanted two centuries of WASP culture. And how can you fail to be charmed by a magazine that goes behind the scenes of a contest sponsored by a local television station (''You Gotta Have Arts'' — explain why in 25 words) and prints the rejected entries?

Near the opposite end of the regional-culture spectrum is **North Country Anvil**, which is published in a Minnesota town so small that I couldn't find it on my map. The editors are scattered over the ''North Country'' of Wisconsin and Minnesota, where the radical roots go deep

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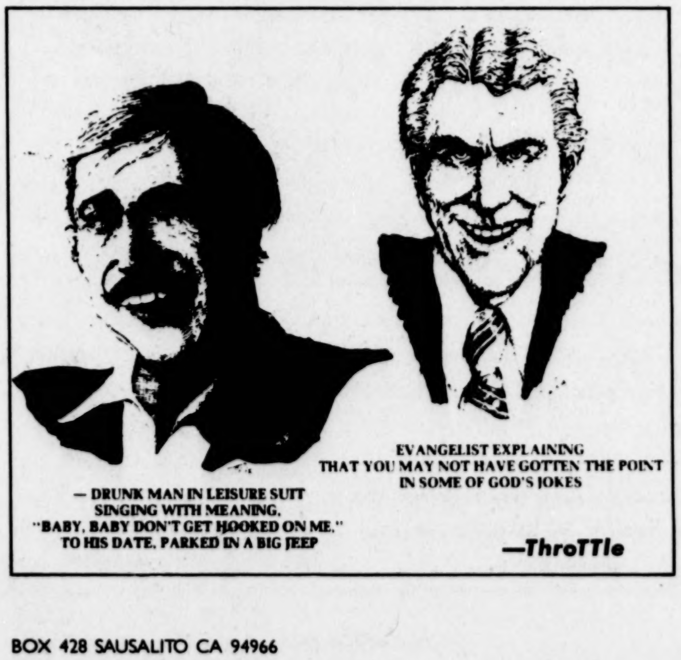
John D. Berry knows whereof he speaks. As a typesetter in Seattle he's keyboarded for most of the local alternative publications at one time or another. He also edited the late **Pacific Northwest Review of Books**, *a tabloid devoted to regional literature.*
—Jay Kinney

in both city and country. The **Anvil** keeps that radical history current, reports on small-town and rural culture as it happens, and turns a moral and spiritual as well as political eye on our national culture. The **Anvil** is the only one of these magazines that's printed on bookpaper, but it's also the most sparsely designed. I get the impression that nobody working on it gets supported by the magazine, but that it's supported by a whole lot of people all over the North Country.

In Canada, the conflict between central government and regions is more clearly defined than in the United States. The Canadian West has been colonized since its settlement, and in recent years the prairie provinces have been enjoying a distinctly regional cultural renaissance. **NeWest Review** started in oil-rich Edmonton and recently moved to Saskatoon, where it's still paying attention to writing, theater, song, politics — all the manifestations of prairie culture. The prairie's population is thin enough, and the cities small enough, that people tend to know each other; even in an article about national energy policies or the rail freight rates, you have the feeling that it's all local. **NeWest** could be a lot less sloppy in its production, but it's a true cultural review for its region.

Sort of slipping in the back way is **ThroTTle**, out of Richmond, Virginia, which doesn't quite fit any category. It's closer to rock papers in tone, and to city tabloids in focus, than any of the other magazines, but it seems to have a clearly regional viewpoint. It's also got the rawest energy and the best sense of humor of any regional mag. The high points of the November/December issue are its graphic collages (most of them in the music ads) and an article on Baltimore that's practically definitive on the effects of gentrification on a working-class city.

Regional magazines are easy to start, but they die easily, too. And the boundaries of what is a "regional cultural magazine" are blurry. We could use more. (Start your own.) Our culture may be more truly made up of the sum of all these parts than of all the national media put together. ■

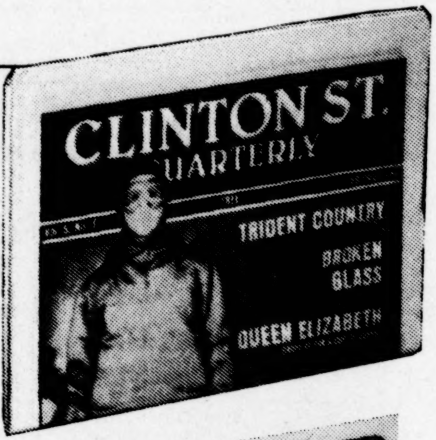


— DRUNK MAN IN LEISURE SUIT SINGING WITH MEANING, "BABY, BABY DON'T GET HOOKED ON ME," TO HIS DATE, PARKED IN A BIG JEEP

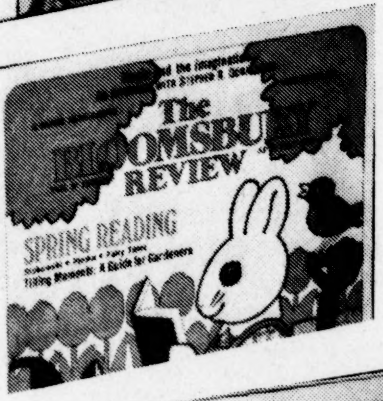
EVANGELIST EXPLAINING THAT YOU MAY NOT HAVE GOTTEN THE POINT IN SOME OF GOD'S JOKES

—ThroTTle

Clinton St. Quarterly
Jim Blashfield, Lenny Dee, Peggy Lindquist, David Milholland, Editors
free in Portland and Seattle; no subscriptions
Clinton St. Theatre
2522 SE Clinton
Portland, OR 97202



The Bloomsbury Review
Tom Auer, Editor
$6 /year (6 issues)
from:
Bloomsbury Review
P.O. Box 8928
Denver, CO 80201



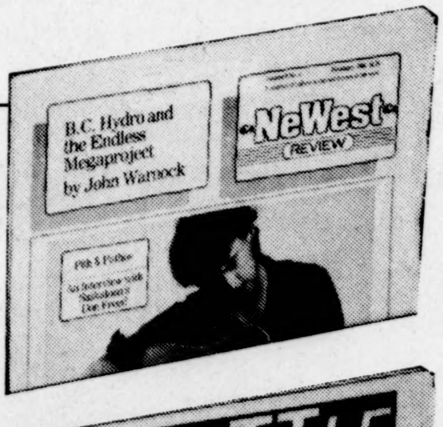
Boston Review
Nicholas Bromell, Editor
$9 /year (6 issues)
from:
Boston Review
10B Mt. Auburn Street
Cambridge, MA 02138

ARTS CALENDAR (see page 19)
Boston Review

NORTH COUNTRY ANVIL

North Country Anvil
Jack Miller, Editor
$8.50 /year (5 issues)
from:
North Country Anvil
Box 402
Winona, MN 55987

NeWest Review
Don Kerr, Editor
$10(Canadian) /year (10 issues)
from:
NeWest Review
Box 484, Sub PO 6
Saskatoon,
Saskatchewan
S7N OWO



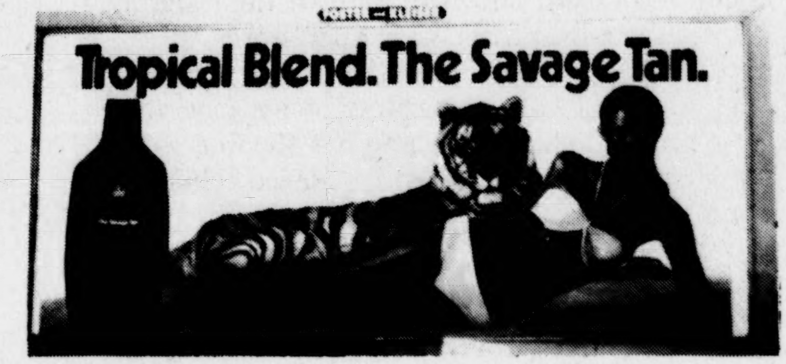
ThroTTle
Peter Blake and Bill Pahnelas, Editors
$10 /year (12 issues)
from:
ThroTTle
P.O. Box 7122
Richmond, VA 23221

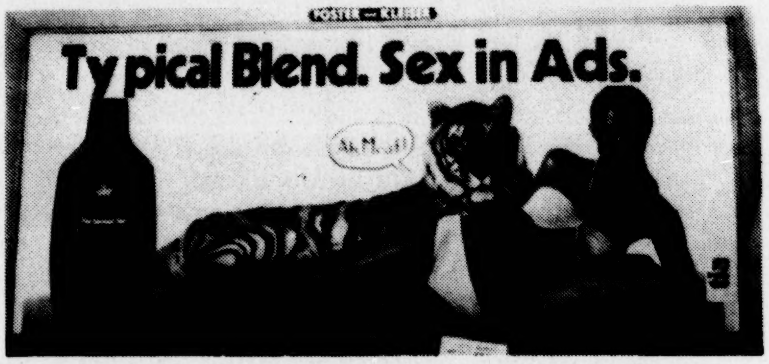
THROTTLE
The Pink Dress

ALTER A BILLBOARD

Are you sick of looking at idiotic and insulting billboards? Did you ever want to change one to convey your own message?

by William Board





July 28, 1982 to Aug. 31, 1982

HERE is how to do a professional looking job of billboard altering with very little risk. The following is a detailed step-by-step procedure. Read it all the way through and start gathering supplies.

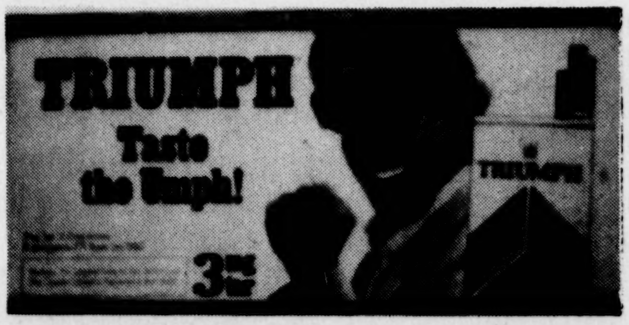
Warning: Altering a billboard is slightly illegal. If you are caught, plead artistic freedom.

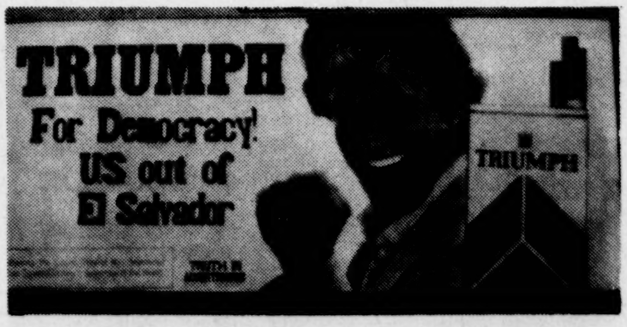
Choose a billboard. Pick a particularly offensive billboard, preferably one low to the ground, and brainstorm on how you could alter the words slightly. Jokes are fun, but the greatest impact is achieved when you can completely turn their message around so that they in effect are paying for their own criticism. Changing a single word can have a great impact, such as "Kent III . . . Experience It!" becoming "Cancer . . . Experience It!" or "Air Force" becoming "Air Farce." Keep it simple, pick billboards with low letters so you can reach them easily, and use single colors, preferably black and white (depends on your artistic abilities).

Determine the sizes of the billboard letters. To match their sign, you need the height and width of their letters, and the size of the area to be covered by your sign over theirs.

Method One: Risky but easy. Get up on the billboard platform at an appropriate hour with a tape measure and measure all needed sizes. Be sure to include the tallest height above the platform that you will have to reach when putting up the sign.

Method Two: No risk, but complicated. Take a polaroid photo, or a 35 mm print (or slide, but only if you have a projector) of the billboard. If the billboard is low, fill the



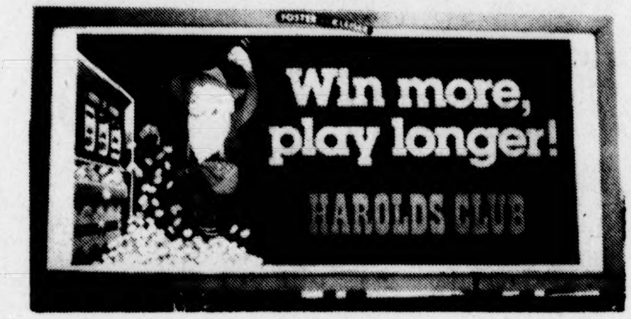


Feb. 15, 1981 to Mar. 4, 1981

If one defines black magic as the practice of evoking desired responses from others — against their will, and often against their best interests — by utilizing "words (and images) of power," then billboards are prime sentinels of such psychic warfare. Of course you may not believe in black magic, but I'll bet you still get a kick out of a clever billboard alteration which manages to turn the tables on the ad agency's intentions.

William Board (a pseudonym) here details how it's done. The before and after jobs, pictured here, were all done by Truth in Advertising (TIA), a group of "midnight billboard editors" operating in the Santa Cruz, California, area.

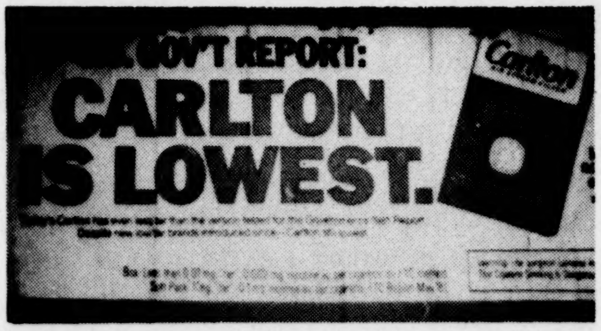
—Jay Kinney



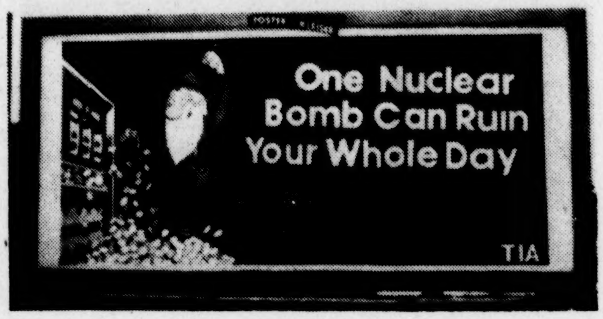
viewfinder with the billboard, but include the posts holding it up. If it is high, get back aways to minimize distortion produced by aiming upwards. If the billboard is very high, you will need to use a telephoto lens in order to reduce distortion. While you are there, measure and record the distance between the posts holding the billboard up (or the length of the billboard). You need this to establish a scale on the photo. If you have a print, measure the letter sizes with a ruler that has 1/100ths of inches (ask at a machine shop where to get one), or use vernier calipers or a micrometer for greatest accuracy. If you have a slide and projector, project it on a wall and measure all needed sizes. Be sure to measure on the photo the distances between the posts that you measured in real life (or the length of the billboard). This gives you the scale as follows:

actual letter size = photo letter size x (actual post distance ÷ photo post distance).

You are just doing proportions here. Use a calculator to minimize brain strain. If the photo is distorted, be sure to compensate by proportions.



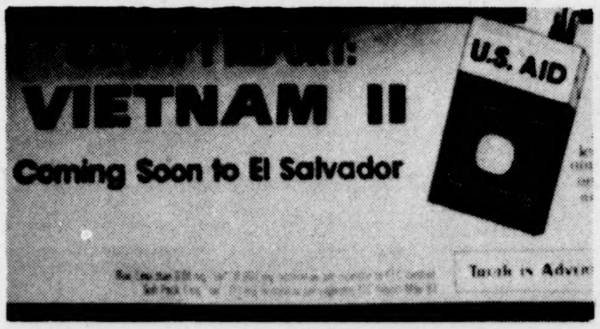
Lay out your sign on graph paper. This will serve as your two-dimensional model for making the full scale sign. The best graph paper for this has light blue lines, with five lines to the inch. Choose a simple scale, like one square on the graph paper equal to two inches on the sign. Draw in the outline of the sign needed to cover the undesirable part of their sign. Then lay out your letters within this space. Remember, some letters are thicker or thinner than others. After blocking them in, actually sketch in the lettering using their type style. A book of graphics lettering might be helpful here. To facilitate gluing, all pieces of your sign need to be rectangles, so divide it up into rectangular sections if it is not already.



July 12, 1982 to July 24, 1982

Get your sign materials. The paper for your sign needs to be large enough and relatively heavy to prevent show-through of their sign. White wallpaper from wallpaper stores is best. The best paint is acrylic. Acrylics are dark and even, are waterproof when dry, are very easy to paint with, and are flexible so the sign won't crack when it's flexed while handling. Get acrylic paint at art supply stores.

Lay out your sign full-size. Measure with a yardstick and cut the paper to the size shown on your graph paper model. Lay out pencil lines marking the tops and bottoms of your letters so that they are all straight. Then draw vertical lines that form a rectangular box for each letter. These box sizes are taken from your model. With pencil, ruler, and compass sketch in the letters, imitating those on their sign and using your model for guidance. This step takes the longest time, and the critical artistic step that will determine how good your sign will look. Have lots of erasers handy for changes. Most people tend to make their letters too thin, so don't be afraid to practically fill up the box with the letter.

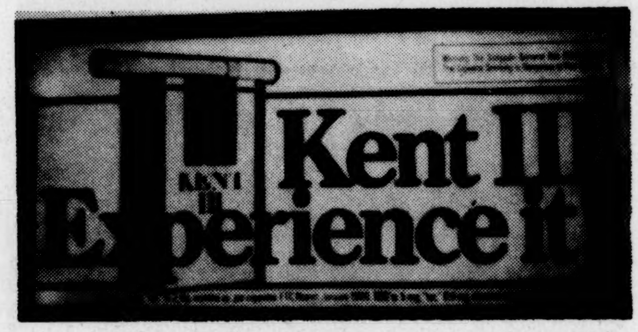


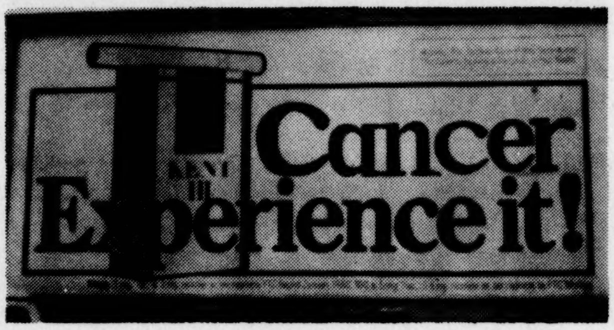
Nov. 2, 1981 to Nov. 20, 1981

Measure the thickness of the letter parts on the photo, and notice how bold advertising type is to attract attention.

Paint your sign. Dilute the acrylic paint with a little water. It is too thick if it doesn't flow, and it is too thin if it doesn't cover completely with one coat. For quick painting, use sponge brushes, say a one inch width, with a chisel shape (available from paint stores). First paint the edges of the letters with great care, then fill in the large areas.

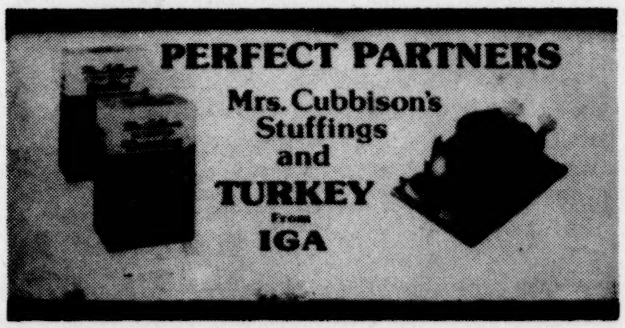
Arrange the "hit." Get a crew of trustworthy friends, and set the date and time. Weekend nights usually have lots of cops cruising. If the site is near a police station, avoid times of shift change. You will need a minimum

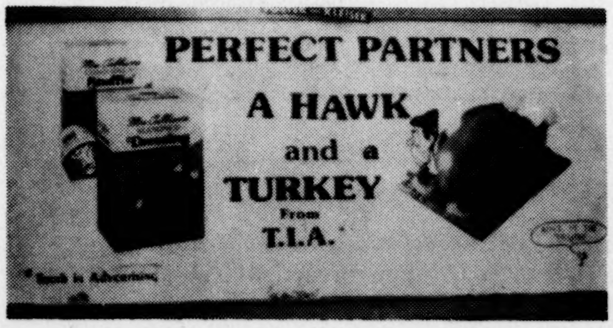




Nov. 26, 1980 to Feb. 1, 1981

crew of two people to apply the sign, one person to assist on the ground, and as many lookouts as are necessary at your site. Talk through the sequence of events so that it goes smoothly. Give the lookouts a definite signal they should use to indicate danger. Make sure your sign appliers are tall enough to reach to the top of your sign when standing on the billboard platform. Use a pair of wooden boxes or light ladders if necessary. Ladders that hook onto the top of the billboard while resting on the platform are the safest. Also you will need to arrange the means for getting everything up on the platform (and down, needless to say). Low billboards remove most of the complications.





Nov. 19, 1981 to Jan. 8, 1982

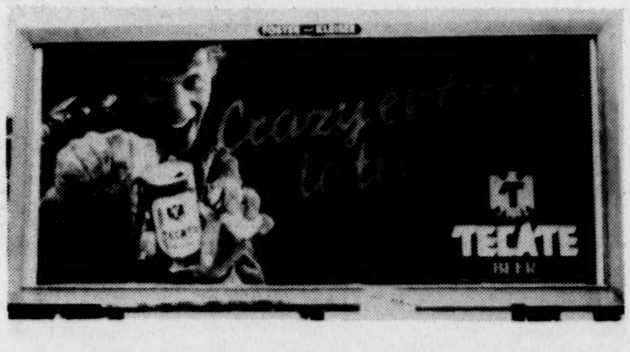
The night of the "hit." Get everyone together at one house. The key to a quick job is to apply wallpaper paste to the back of your sign just before you go to the site. You then fold the sign back on itself, sticky side to sticky side. This is standard wallpaper hanging practice. Because the glue stays tacky for 20 minutes or more, you can peel it open to apply it. But don't skimp on the glue. You can now carry the sign easily, or even fold or roll up the doubled-up sign. You can peel the sign open when you are up on the billboard platform. Remember, you have only about 20 minutes. The pre-mixed glue is not as good because it dries faster and is more expensive than the powdered wallpaper glue you mix with water. Wallpaper and paint stores have the powdered wallpaper glue. If you need more time, you might try spraying the front of your sign (after the paint is dry) with a very thin layer of clear lacquer to reduce the rate of water evaporation from the paste when it is applied later.

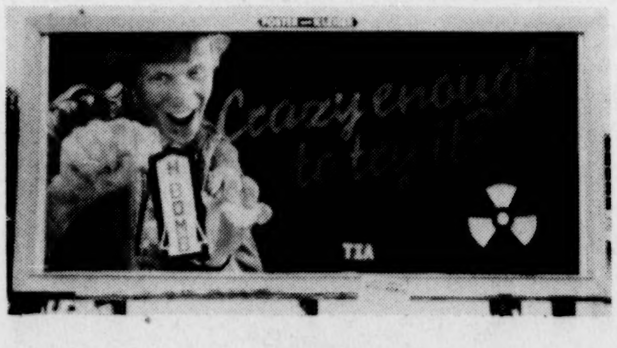
Do it! Post the lookouts, and get up on the billboard platform. Peel open the sign and hold it up so the ground assistant can advise as to the straightness, centering, and coverage. Be careful in handling your sign because the water in the glue makes the paper very easy to tear. Apply the sign, and use a roller (preferably hard rubber) to flatten it tight against the billboard. If there is more than one piece to put up, do them in the right sequence. Jump down and admire your work of art. If you didn't get caught in the act, you are safe! Congratulations on your first successful billboard alteration!

Writing out the procedure like this makes it seem longer and harder than it really is. It is an effort, but the results are well worth it. Use your own imagination to improve on the procedures outlines here.

Supply List

camera
tape measure
accurate ruler, vernier
  caliper, or
  micrometer
calculator
graph paper
  (5 lines per inch)
white wallpaper
acrylic paints
sponge brushes
yardstick
pencils and erasers
ladders if needed
wallpaper paste
  (powdered type)
pail and wide
  brushes for paste
roller ■





June 30, 1982 to July 9, 1982

Spray It Loud

Graffiti is the advertising of the dispossessed, and in its most common form says little more than "I exist, too." A few steps up in imagination come spray-painted political slogans — some clever, many cliched — and at the top of the form are billboard alternations such as Truth in Advertising's on the preceding pages. **Spray It Loud** *documents both the slogans and ad reversals of the last few years in England — and a mixed bag it is. As is usually the case the slogans are predominantly vehement and/or prescriptive (try the catchy "Kill Men" on for size) while the billboards are grimly hilarious. But all of them are bound to produce a strong reaction and make you reconsider your assumptions. As gritty street-culture history* **Spray It Loud** *provides a service.*

—Jay Kinney

Spray It Loud
Jill Posener
1983; 96 pp.
$5.95
postpaid from:
Routledge & Kegan Paul
9 Park Street
Boston, MA 02108
or Whole Earth
Bookstore

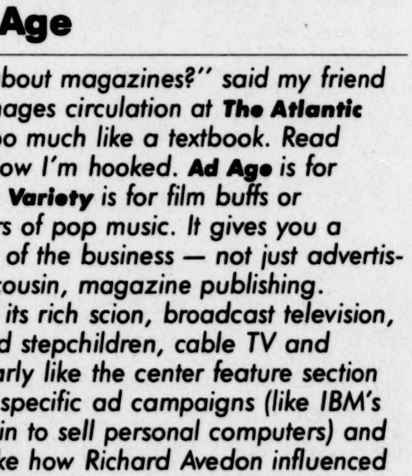
RENEWS HIS INTEREST IN CARPENTRY

Advertising Age

"You want to learn about magazines?" said my friend Lisl Folsom, who manages circulation at **The Atlantic Monthly**. *"***Folio** *is too much like a textbook. Read* **Advertising Age**.*" Now I'm hooked.* **Ad Age** *is for magazine buffs what* **Variety** *is for film buffs or* **Billboard** *for followers of pop music. It gives you a weekly insider's view of the business — not just advertising, but its intimate cousin, magazine publishing. (There's also news of its rich scion, broadcast television, and its young bastard stepchildren, cable TV and videotext.) I particularly like the center feature section with long articles on specific ad campaigns (like IBM's use of Charlie Chaplin to sell personal computers) and magazine makers (like how Richard Avedon influenced fashion photography). But the best parts of* **Ad Age** *are the ads from magazines to advertisers, showing what the magazines think of themselves and their readers. The worst part is its lack of coverage of the rich and varied world of small magazines outside the commercial mainstream. (Saying "New York mainstream" no longer applies because too many magazines are based elsewhere now.) In the absence of an independent fanzine about magazines in general, I'll follow* **Advertising Age**.

—Art Kleiner
[Suggested by Lisl Folsom]

Advertising Age
$50 /year (50 issues)
from:
Advertising Age
740 Rush Street
Chicago, IL 60611


Marketers await return of 'Star Wars' summer
Advertising Age
NBC opens piggyback gate
Cable gets serious on ads
Gillette puts shower soap into liquid tray

North London Railway Line, Islington, 1981

Madison Avenue

Want to see which case of flatulent thinking **Mad** *magazine will parody next? Check out* **Madison Avenue**, *an advertising trade mag that's been around for 25 years and seems to enjoy good standing in the New York ad community. Advertising can be brilliant, forecasting — even forming — the far end of mass culture. (The best of television programming has yet to catch up to what high-tech commercials were doing three years ago.) To be fair,* **Madison Avenue** *captures some of this, and that is probably its greatest value. The dominent sense one gets from* **Madison Avenue**, *however, is that of advertising as a community of hustling middlemen who pass off as their own "creativity" the impact of the mediums they've stumbled into. You'll see the cure for the recession described as getting consumers to "loosen up on the pursestrings," environmental concerns judged "progressively less" important in outdoor advertising, shameless kowtowing to big-ticket advertisers, and generally sloppy editing.* **Madison Avenue** *merits attention mainly because it is so energetically misdirected.*

—Joe Kane
[Suggested by Mitch Anthony]

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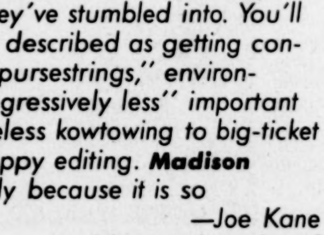
Outdoor is an extraordinarily lucrative business. Two of the most highly visible examples are Ted Turner and Karl Eller, both of whom developed huge holdings based initially on relatively small outdoor interests.

Less visible but even more indicative are those who have entered the business attempting to emulate others' success. Examples abound; the scramble for bus shelter advertising in New York and its expansion to other markets, the burgeoning popularity of taxi advertising, the extraordinary amounts being paid for transit advertising franchises, the development of Junior Panels as a major new arm, the use of backlighting and vertical signing. These are all positive changes.

Negative forces have also been working in favor of the industry. Two such are zoning restrictions and the fear of dominance by one category. These forces, contrary to expectations, have combined to open up the medium and to increase its effectiveness in the penetration of individual markets. They have forced the industry to be even more resourceful in its expansion plans.

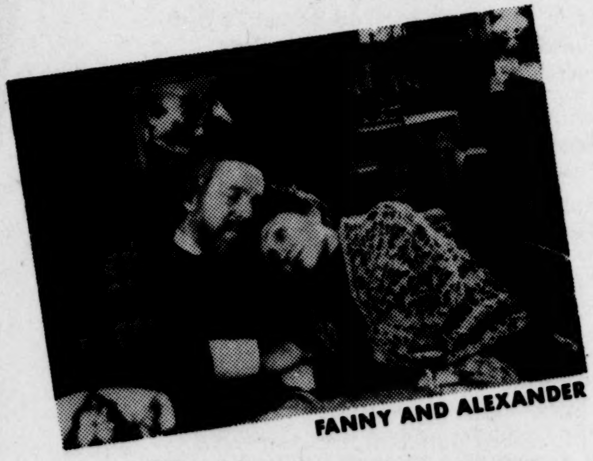


Madison Avenue
Steve Blount, Editor
$40 /year (12 issues)
from:
Madison Avenue
Magazine Publishing
369 Lexington Avenue
New York, NY 10017

GOOD MOVIES: SUMMER

By Sheila Benson

Sumptuously beautiful, life-affirming, and deeply satisfying, FANNY AND ALEXANDER seems at first like a fairy tale remembrance, the life of a large theatrical family in Sweden in the early 1900s. The lavish opening Christmas sequence seems to be all reds and greens, warmed by the glow of hundreds of red candles throughout the resplendently comfortable Ekdahl mansion as family, friends, and servants join in the affectionate despotism of the holiday traditions. We are introduced to almost all the film's characters at the home of matriarch Helena Ekdahl, now widowed, but still ruling owner of the theater where her son Oscar and daughter-in-law Emilie perform. Fanny and Alexander are the children of Oscar and the lioness Emilie (Ewa Froling), thick-browed and magnificent, a majestic new Bergman discovery and possibly the most exciting of his stars. Shortly after the film opens she is unexpectedly widowed. Displaced from her proper setting in the center of this theatrical wonderland, she is courted by a stern, handsome widower bishop (Jan Malmsjo), both ascetic and passionate. (When she marries him the film moves into its Carl Dreyer section.)



FANNY AND ALEXANDER

Erland Josephson plays matriarch Helena's patient love and closest friend, a Jewish antiques dealer and part-time illusionist. After **Scenes from a Marriage** and **Face to Face** he will probably be the best known of Bergman's performers as audiences go into the film, although Ewa Froling may be its greatest lure going out. But there is no member of this enormous cast who is not superb and memorable. If **Fanny and Alexander** is, as Bergman has announced, his last theatrical feature, it is also the sublime achievement of his career. **It is ribald, mysterious, sensuous,** reflective, poignant, romantic, and lastingly moving. And amid this summer's light-headed delights (no less fun for their lightness), it is the anchor for those who like content with their style.

★ ★ ★

The Jedi return to us at last, older, wiser, and frankly irresistible. Richard Marquand (**Eye of the Needle**) was George Lucas's choice to direct **RETURN OF THE JEDI**, and he seems to have been a fine one. There is a weight and a roundness to this last section which seems entirely fitting, and enough invention to people three ordinary films. Although the evil, disgusting Jabba the Hutt may capture the kids' imagination (something about him resembles the most decadent of Aubrey Beardsley characters), I suspect adults will be captivated by a forest full of tree-dwelling Ewoks, who make **Return of the Jedi** feel like The Teddy Bears Picnic. (**Jedi** is actually the ultimate Marin County subliminal message.)

All the characters return (including Obi-Wan Kenobi and Yoda) as the three principals confront their final destinies. The long-awaited showdown between Luke and Darth Vadar is particularly fascinating and ultimately touching. Mark Hamill has grown in stature as an actor; it is no problem seeing him now as a true Jedi knight. For his part, Lucas has now advanced enough in his thinking about Princess Leia that she can not only be strong but can look sensationally sexy as well in the slave-girl outfit the loathesome Jabba forces her to wear (ah, the shame, and the attractiveness, of it all). And she seems well able to fulfill the secret this episode of the film reveals about her.

Lawrence Kasdan, who did the screenplay with Lucas, may be responsible for a faster, more offhand feeling in the exchanges between Luke, Han Solo, and Leia, or it may be Marquand's touch as a director. Whatever it is, even C-3PO and R2-D2's characters seem richer and more fun. Only Billy Dee Williams's Lando Calrissian is still a bore, for the simple reason that Williams never seems to speak his dialogue with any snap. It's a minor enough point, though, given the richness and inventiveness of every other detail of the film. And when you consider the challenge Lucas must feel, needing to equal, let alone top, his two previous films, you appreciate even more the seemingly inexhaustible imagination he brings to this magical morality play.

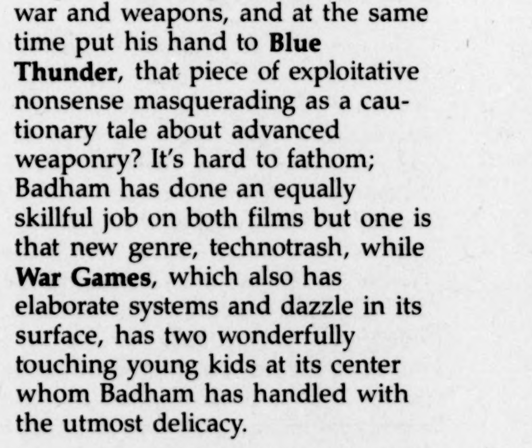
RETURN OF THE JEDI

★ ★ ★

For the last of the big ones (since we see **Superman III** after press time) and the next pleasant surprise, try **WAR GAMES**, a real puzzler. How can director John Badham turn out as superb a film as this one, with its underlying desperate message about nuclear war and weapons, and at the same time put his hand to **Blue Thunder**, that piece of exploitative nonsense masquerading as a cautionary tale about advanced weaponry? It's hard to fathom; Badham has done an equally skillful job on both films but one is that new genre, technotrash, while **War Games**, which also has elaborate systems and dazzle in its surface, has two wonderfully touching young kids at its center whom Badham has handled with the utmost delicacy.

Part of **War Games**' joy may be its fine script, by Lawrence Lasker and Walter F. Parkes, which gives us high-school computer whiz David Lightman (Matthew Broderick) and his classmate, Jennifer (**Bad Boys**' Ally Sheedy), who accidentally stumble into NORAD's computer system in search of the system of a new video-game producer. The two start a game with the NORAD

WAR GAMES



SAY AMEN SOMEBODY

computer, unaware that their game is its reality. It's a doomsday scenario with humor, imagination, and style, in addition to stomach-twisting suspense. The fine British stage actor, John Wood, makes his major-film debut arrestingly as the man behind the brain of the NORAD computer; Dabney Coleman is his former assistant, and Barry Corbin is wonderful as the NORAD general. (In a nice switch, the military men are not necessarily the ones with the most itchy trigger fingers.) I suspect that every kid let loose from school this summer will see this film a minimum of two times, and that the greatly talented Broderick (son of the late actor James Broderick) will shortly be one of the screen's most employed young actors. His chemistry with Sheedy is only one of the film's charms.

* * *

SAY AMEN, SOMEBODY, which burst on an unsuspecting world at nine a.m. on a Sunday morning during last year's Telluride Film Festival, is an exultant look at the world of gospel and in particular Mother Willie Mae Ford Smith (now 77) and Dr. Thomas A. Dorsey, the 83-year-old father of gospel music.

These pioneers in this stubbornly American musical form sing out of their belief, and the sense of uplift and purpose they have to their lives is absolutely palpable. The beauty of George T. Nieremberg's film is that that feeling communicates itself wholeheartedly to the audience; you come out of **Say Amen** feeling joyful clear down to your shoestrings. Structured around a tribute to Mother Smith at Antioch Baptist Church, which gathered some of the great voices in this field for the occasion, including the amazing Barrett Sisters (with their lead singer, Delois Barrett Cambell); the husky baritones, the O'Neal twins; new young singer Zella Jackson Price; and Mother Smith herself, the film gives us an intimate look at the price as well as the glory of a dedicated life.

Nieremberg's earlier film was **No Maps on My Taps,** about the great remaining tap-dancers. This second portrait seems even finer; we learn so much so effortlessly. By the time Dr. Dorsey is gathering his strength for a last gospel convention meeting (which he has attended since its beginning), we understand as clearly as any convention member what his presence means and we care deeply that he make it one last time. The result is a truly thrilling moment.

* * *

It should hardly be a surprise that an actor whose characteristics (in addition to effortless technique) are superb watchfulness and observation has made a fascinating film based upon his close investigation of a closed-off life style. Robert Duvall was drawn into the life of urban gypsies in New York by an overheard remark made by a bizarre, macho-drenched seven-year-old named Angelo Evans. By the time Duvall was able to fund his film himself Angelo was ten but nothing had changed. You could call it *cinema verite,* except that Duvall fashioned an easy little storyline for his natural actors; what sets the project apart is that none of the gypsies could read, so the film became a sort of free-form improvisation.

ANGELO, MY LOVE is a seductive entertainment based on the lives, rituals, and traditions of these richly eccentric people, scofflaws from the cradle. You feel Duvall falling in love with Angelo, a hot, lying, funny, intuitively perceptive and absolutely amoral character. (He can't read either, as a wonderful scene in a school classroom establishes. It's almost a good thing; if he could read and write he'd be our next Sylvester Stallone.) We follow him as he gets up at noon, makes a lackluster try at passing his mother's "bills," her fortune-telling adverts, on New York's West Side, and spends part of the night with his 14-year old brother in discos, where he cuts a wide swath. The slim little story has to do with the theft of a ring earmarked for Angelo when he becomes 15, the resulting gypsy trial or *kris* about its whereabouts, and the chase that ensues when results go against Angelo and his family. Not only Angelo and the whole Evans family are superb natural improvisors; a brother and sister pair, the Tsigonoffs, whom Duvall found in Los Angeles, are as raffish a pair of villains as you could want. It's heady stuff and a notable directing effort for Duvall.

* * *

There is wonderful good news for a whole new generation of moviegoers. After decades watching one of the great, underappreciated men of comedy through scratched, snowy prints, we now have four superb prints of the cornerstone films of Jacques Tati—**JOUR DE FETE, MR. HULOT'S HOLIDAY, MON ONCLE,** and **PLAYTIME**—playing engagements around the country.

There is a dark side to almost any news, and the bad news here is that these prints have come only after Tati's death last November. His career had gone into eclipse in the last decade; he had poured his personal money — as he always did — into his productions and was unable to finance further works. But at least we have these. Hulot was his greatest creation, this great, gallant Gallic stork whose ineffable politeness got him into most of his worst disasters.

You can start veterans of any Hulot films giggling uncontrollably just by exchanging memories of some of his great scenes of physical humor: Hulot in riding boots and spurs, being attacked by a fox-fur rug; Hulot and the kayak which folds him unexpectedly in half in the water so that his pipe is suddenly touching his kneecaps; Hulot, the horse, and the car rumble seat. Or, best of all, Hulot's tennis serve, a lethal affair which begins with a sort of fencing thrust at waist height, one knee bent forward, the racket shoved quickly out and back as if he were presenting it on a tray. It's followed by an overhead serve that would be ludicrous if it were not so lethal.

But the best and most succinct descriptions of Tati reached me just recently in a letter from a writer named Billy Beck who had appeared as the grocer in **Mon Oncle** (a character who "after chasing the kids from the street puddle is splashed by a passing truck, then given the coup de grace by Hulot and his *velo moteur. . .*"). Wrote Mr. Beck: "He was a disciplined, organized perfectionist, using his talent in the defense of a life of spontaneity and improvisitation where human contact was all that mattered." ■

MON ONCLE

ANGELO MY LOVE

Watersafe
Your Baby
in One Week
DANUTA RYLKO

The toss: Starting high . . .

. . . he begins his flip . . . *important* — give him time to try!

. . . dropping hands away . . . and baby goes in head first . . .

Mission accomplished.

Watersafe Your Baby in One Week

This book grew out of the often tragic encounter between toddlers and backyard swimming pools. The method requires at least 80 degree water — more than a bathtub full, but not necessarily a whole swimming pool full. How well it might work for kids who live near cold or moving water is uncertain, except that these techniques are clearly better than doing nothing.

The author has been teaching this method to hundreds of children for over ten years. The six-day course presented here is a wonderful distillation of reflex manipulation, child psychology, common sense and fun.
—Richard Nilsen

•

Teaching a child to save his own life in any body of water is a relatively simple procedure. Teaching a baby life-saving techniques requires about half an hour a day for six consecutive days. In less than a week, by following the daily procedures in this book, you can teach a baby water survival. You can teach an infant as young as 4 months to hold his breath, to surface after a tumble into a pool, to flip to his back, and **breathe** and **relax** and **float** . . . indefinitely — for hours if necessary — until help arrives.

Watersafe Your Baby in One Week
Danuta Rylko
1983; 90 pp.
$6.20

postpaid from:
Addison-Wesley Publishing Company
Jacob Way
Reading, MA 01867
or Whole Earth Bookstore

The Read-Aloud Handbook

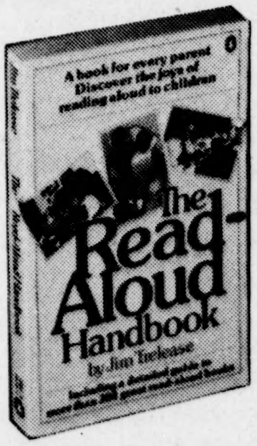
*This is **the** book I plan to give to each of my son's teachers throughout his school career. If you are an educator, read it; if you are a parent, read it. Jim Trelease makes the most convincing, most hopeful statements about how to reverse increasing illiteracy in America that I have seen. His chapter about television's effects on kids is downright scary in its discussion of what TV offers and teaches them; but more importantly he gives parents workable suggestions on how to cope with its influence. Indicative of the book's usefulness, the second half is a listing of 900 of Trelease's favorite read-aloud books, coded for age groups, and with synopses for many of them.*

*The value of this book is in its practical and simple approach — if we want to we **can** have children who want to read, who want to learn, who want to think. We need only give them our time. Trelease quotes Ruth Love, superintendent of Chicago public schools, in his introduction: "If we could get our parents to read to their preschool children 15 minutes a day, we could revolutionize the schools."* *—Lindi Wood*

•

Fathers should make an extra effort to read to their children. Because 90 percent of primary-school teachers are women, young boys often associate reading with women and schoolwork. And just as unfortunately, too many fathers prefer to be seen playing catch in the driveway with their sons than taking them to the library. It is not by chance that most of the students in remedial-reading classes are boys. A father's early involvement with books and reading can do much to elevate books to at least the same status as baseball gloves and hockey sticks in a boys estimation.

The Read-Aloud Book
Jim Trelease
1982; 215 pp.
$6.70
postpaid from:
Penguin Books
299 Murray Hill Parkway
East Rutherford, NJ 07073
or Whole Earth Bookstore



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TINTIN IN TIBET
by Hergé
Little, Brown, (paperback only), 1975
Grades 2-4 62 pages

When you've been in print for fifty years, been translated into twenty-two languages and praised in *The Times* of London and New York, you must be special. Tintin is just that. He's the boy-detective who hopscotches the globe in pursuit of thieves and smugglers. Loaded with humor, adventure and marvelous artwork (700 pictures in each issue), Tintin's special appeal for parents who want to assist their child in reading is the fact that each Tintin contains more than 8,000 words. Having heard Tintin read aloud, children will want to obtain his other adventures and read them by themselves, oblivious to the fact that they are reading 8,000 words in the process. Because of the size of the pictures, Tintin is best read aloud to no more than two children at a time. There are more than twenty different adventures in the series, sold primarily in select bookstores.

Trouble at Home

How to Live with a Single Parent

There are plenty of books for parents on how to cope with family crises and the stress of raising children, but few for children on how to cope with family crises and the stress of living with their own parents. Sara Gilbert fills this void admirably. With refreshingly direct language — never patronizing or phony — she addresses both common and uncommon difficulties many teenagers confront: divorce of parents, family financial woes, the care and handling of single parents, death in the family, incest, child abuse, sibling problems, etc. Through numerous anecdotal examples, she offers practical advice and comforting perspective — the reassurance that someone else has confronted the same problems before, and survived.

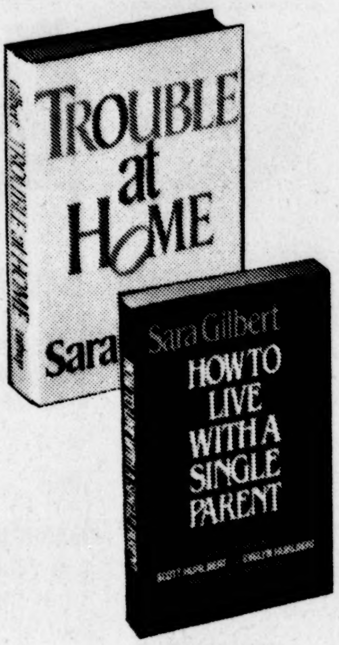
Teenagers are not the only ones in need of common sense and practical wisdom, and kids who find these books helpful might do their folks a favor and offer to loan them a book or two. —*Carol Van Strum*

Trouble at Home
Sara Gilbert
1981; 192 pp.
$10.95 postpaid

How to Live with a Single Parent
Sara Gilbert
1982; 128 pp.
$7 postpaid

Both from:
Lothrop, Lee and Shepard Books
William Morrow and Company
Wilmor Warehouse
6 Henderson Drive
West Caldwell, NJ 07006

or Whole Earth Bookstore



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You may have to say, for example, "If you want to know about Mom's (Dad's) private life, why not ask for yourself?" or "I can understand why you're angry, but I don't like hearing about how bad my other parent is." Does this kind of conversation sound hard? Maybe it will be, but you'll feel better for having gotten your feelings out in the open and it is likely that your parent or parents will understand how important it is to leave you out of their battles or private grief.

—***How to Live with a Single Parent***

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Conflicts betwen a child and an abusive parent go much deeper and are more serious than the normal struggles most kids have with their parents over rules and discipline. But if you are like many caught in a child abuse situation, you are ashamed or afraid to talk about it — ashamed because it's behavior frowned upon by our society, and afraid because of the threat to you if you "squeal" and because revealing your parent's criminal act (child abuse is a crime) could break your family apart.

The fear and shame are normal, but you must get beyond these feelings and do exactly what you are avoiding: talk about the problem. Why? Because abuse or neglect leads not only to emotional damage but can result in permanent physical damage or even death. At least one million children are abused or neglected annually in this country and as many as five thousand children die each year as a result of maltreatment. These are serious consequences that silence cannot prevent. Unfortunately, too, the victim of the abuse, who almost never has a real choice in the matter, often mistakenly feels as if he or she provoked or somehow brought on the disturbed behavior — and thus remains tight-lipped about it. So the ball's in your court to speak up. Pay attention to how you are feeling as well. The knots inside you are doing more than causing indigestion — they are signs of agonizing stress in your own life. You'll start feeling better once you stop pretending to yourself and others that everything's all right, and once you can help your family do the same.

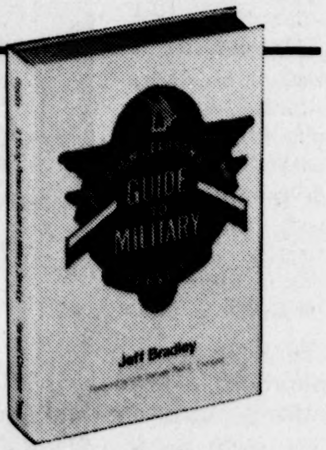
—***Trouble at Home***

Young Person's Guide to Military Service

Not a great book, but it greatly helps with the momentous decision of whether to go into the military and if so which one. My two peacetime years ('60-'61) as an Army officer taught me at least as much as four years in college. I've always felt a little sorry for contemporaries who, for excellent reasons, didn't get that experience. Military service takes you out — out of home, out of school, out of family, out of class surroundings, and out of freedom. You learn how to do time, how to do a day's work, how to manipulate huge systems, and how to get along with absolutely anybody. It's often refreshing at a tender age to live without making decisions for a spell. I miss it sometimes. With more and more women in the military, the major former drawback is now alleviated. —*Stewart Brand*

Young Person's Guide to Military Service
Jeff Bradley
1983; 175 pp.
$8.95
postpaid from:
Harvard Common Press
535 Albany Street
Boston, MA 02118

or Whole Earth Bookstore



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In some respects all the various branches of the armed forces are the same. All of them will get you up at the crack of dawn during basic training, and pay and promotion schedules are roughly similar. Every branch offers job training, and benefits come to all veterans who have been given good discharges.

Despite these similarities there are a great many differences. In the Air Force, for example, the officers are involved in most of the combat while the enlisted people stay on the ground. The Navy offers you a chance to travel all over the world, whereas in the Coast Guard you'll never find yourself spending Christmas in the middle of the Indian Ocean. A soldier in the Army may participate in maneuvers in West Germany, whereas a National Guardsman may assist during flooding or other natural disasters.

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Unlike in the Navy, where women are barred from serving on combat vessels, it is possible for women in the Coast Guard to serve on or even command the largest ships.

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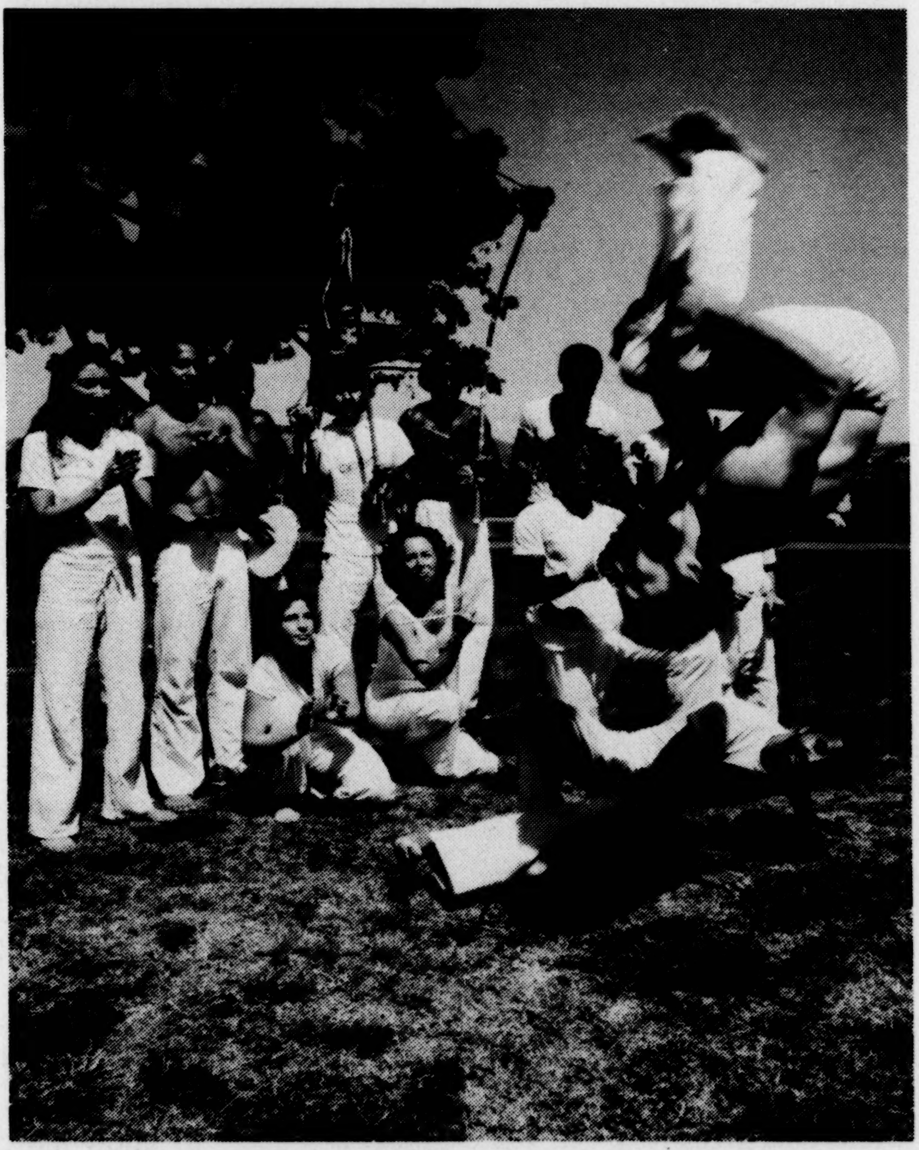
If the recruiter promises you specific training or any of the various options, have him write it into the enlistment agreement. Spoken promises are worthless. If he refuses to do this, then you should be highly suspicious of what you have heard.

CAPOEIRA

A martial art from the streets and jungles of Brazil comes north.

by Richard Grossinger

CAPOEIRA is virtually unknown in the United States. Even most educated people would be surprised to learn that it is a native Brazilian art with roots in Africa. Those who know of it superficially might picture a combination of Brazilian music and folk theatre, but *capoeira* (pronounced cop-oh-WARE-ah) is a preliterate system of knowledge and philosophy that has also trained some of the most dangerous warriors our species has known.


TOM WACHA

"Pulo do Gato." During the *roda*, the *capoeirista* must be ready for any sudden movement — even while upside down.

The roots of *capoeira* disappear into the chaos of sixteenth-century Brazil. Clearly, a major aspect of *capoeira* is African in origin, coming from the music, dance, folklore, and warfare of the combination of Yoruba, Malé, Dahomean, Bantu, and Hausa peoples brought to Brazil as slaves. But *capoeira* arose from a combination of regional traditions in one of the syntheses of early pan-Brazilian culture. Even the etymology of the name is in doubt, having alternative derivations from a Guarani Indian term for cut wood and a Portuguese folk name for a species of bird with a particularly aggressive male.

By the time a written history of *capoeira* appeared in the eighteenth century, it was already a popular form of street-fighting, and the *capoeirista* is a well-known trickster-warrior in Brazilian folklore, with aspects of both the thief and the early guerrilla freedom-fighter. Over the years it has been so

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Richard Grossinger's most recent books include **The Night Sky** *and* **Planet Medicine** *(reviewed in* **CQ**, *Winter '81). He is currently writing the third book of this "trilogy," an in-depth study of embryology to be titled* **Embryogenesis**. *Grossinger's North Atlantic Books has recently published* **Capoeira** *by Bira Almeida ($7.95 postpaid from 2320 Blake Street, Berkeley, CA 94704), which offers further information on this Brazilian art form.* *—Jay Kinney*

I WAS watching the beginning of the South American invasion, and I saw the ashes of Jonestown and the SLA transformed into a healing dance.

associated with outlaws and the lower classes in Brazil that it has had difficulty gaining legality, let alone respect. Today it is regarded as a kind of rough ethnic sport and back-alley training, though it has gained some stature in the last ten years, and, with government sanction, there are several gyms and schools in major cities.

I first heard of *capoeira* in the spring of 1982. I was editing a book by a retired CIA agent writing under the name of John Gilbey. "Gilbey" had used his global travels to seek secret masters of the spiritual fighting arts. These included an Icelandic master of *fotan*, an ancient system of crushing rocks by paraphysical methods; a Hawaiian adept in *lua* (secondhand, for if there are any practitioners of *lua* left, they keep their identity secret); and various other gurus, warriors, charlatans, and shamans, with Gilbey leaving the reader to decide the authenticity of each practice. There was also a *capoeirista*. For purposes of explanation, Gilbey reviewed and summarized the conflicting Brazilian literature on this subject, and I will further condense some of his main themes:

In Africa, *capoeira* was a psychic and religious dance, and the Bantus in particular continued to practice it in Brazil, blending it with other ceremonies and adapting it to the severe conditions. At this stage *capoeira* generated a deep and powerful trance, and the skilled practitioner entered into other realms of being. This trance was a source of both enlightenment and relief. As in the Plains Indian vision-quest, lessons and techniques were learned from spirits and allies in other dimensions of consciousness. One of these was a method of fighting while shackled. The *capoeiristas* learned to fight with their legs and heads; to feint and tumble and spin in complex maneuvers; and to hide sharp objects between their toes, in their specially-combed kinky hair, and at other unexpected parts of their persons. Blended with witchcraft, voodoo, and chanting, and embodied in a series of initiation rites, *capoeira* fighting was carried into the kingdoms of escaped slaves in the interior of Brazil; when it returned in the nineteenth century it was in the form of self-made armies of *capoeiristas* invading and plundering the cities. More than 15,000 invaded Rio, and in 1808 a special military police was founded, with one of its missions to quell the *capoeiristas*. At its head was Major Miguel Nunes Vidigal, a traitor *capoeirista* who enjoyed dreaming up special tortures for his former comrades, the most frightening of which can be translated, ambiguously, as "The Shrimp Supper."

Although *capoeiristas* later allied with the various governments of Brazil to fight against Paraguay and to expel German and Irish mercenaries, enough of them were bandits and pranksters that laws against the practice and teaching of *capoeira* were passed. It was in 1932 that *capoeira* took a new course: the generally recognized master of the skill, Mestre Bimba, opened an academy for teaching in Bahia. It was recognized by the Office of Education and Public Assistance in 1937. Mestre Bimba incorporated the many styles and moves of *capoeira* into a single set of movements and a formal practice with levels of development.

After reading Gilbey's account, I was curious to know more about *capoeira* and found it hard to imagine what it looked like in practice. Then, in one of those curious coincidences that do happen on occasion, the decades and miles that apparently separated any American from *capoeira* vanished in an afternoon in Berkeley. An acquaintance well-known for his use of martial techniques in therapy told me (when I asked him what he was doing these days) that he had begun studying *capoeira* with one of the masters. I struggled to recall which of Gilbey's systems this was, and I said something about African slaves in Brazil. "That's the one," he nodded. Bira Almeida, known in Brazil as Mestre Acorjeon, one of the ten *mestres* certified by

Mestre Bimba, had been teaching in California for almost two years. It turned out that he was assembling a book on *capoeira* and needed advice on editing and publishing. I got his phone number and called him, and we set up a meeting for later that week before his class at Julius Baker's Tae Kwon-Do Studio in downtown Berkeley.

As I entered Julius Baker's at 4:45 in the afternoon, there was a class of Afro-Americans practicing hard jabs in unison with shouts. As the class ended, I began asking around for Bira Almeida, but no one seemed to know him, and I was told mainly to stay off the mat. The next class was forming all the way across the mat by the dressing rooms, and I could hope only that Bira would remember and look for me.

None of the people in the group seemed quite right for this master from Brazil, but when he entered late, he was unmistakable. A tall solidly-built Euro-Brazilian in his late thirties, he moved with buoyant energy and spread a kind of playful jive. In thinking later how to describe him, three very different people came to mind: Fidel Castro, for his Latin charisma and quixotic power; Don Juan Matus, the Yaqui shaman, for the feeling of wizardry about him, though none of us have seen that one, so it is a matter of imagination; then, clearly, a bit of Clark Kent, conjured up by the glasses and briefcase he carried before he changed into the costume of his art.

He talked to his students for ten minutes, during which I felt only once that he might have met my eyes long enough to acknowledge that he remembered the meeting. Just as the class was beginning and I was about to give up, he broke off, came over and introduced himself to me, and led me into the studio's small office. He patted his briefcase and said in his accented English, "The World Capoeira Association, all in here."

For 15 minutes, he outlined his project and told me of the difficulties. Only at the end, as he was leaving to go out to the mat, did he hand me, almost as an afterthought, a copy of his work, suggesting that I look it over and leave it in the office. Following him out, I turned through the pages and sat on a bench without looking up. I began reading at a random spot:

> Mestre Bimba said *capoeira* is treachery. Long live he who held my hands and showed me how to be in time with the motion. *Capoeira* is also an art one plays anywhere, under any condition, even when in an unbalanced situation. Wherever you are must be the right place to be. And for me, the place is now. So it doesn't matter if some people think I am a fool, crazy, or even presumptuous.

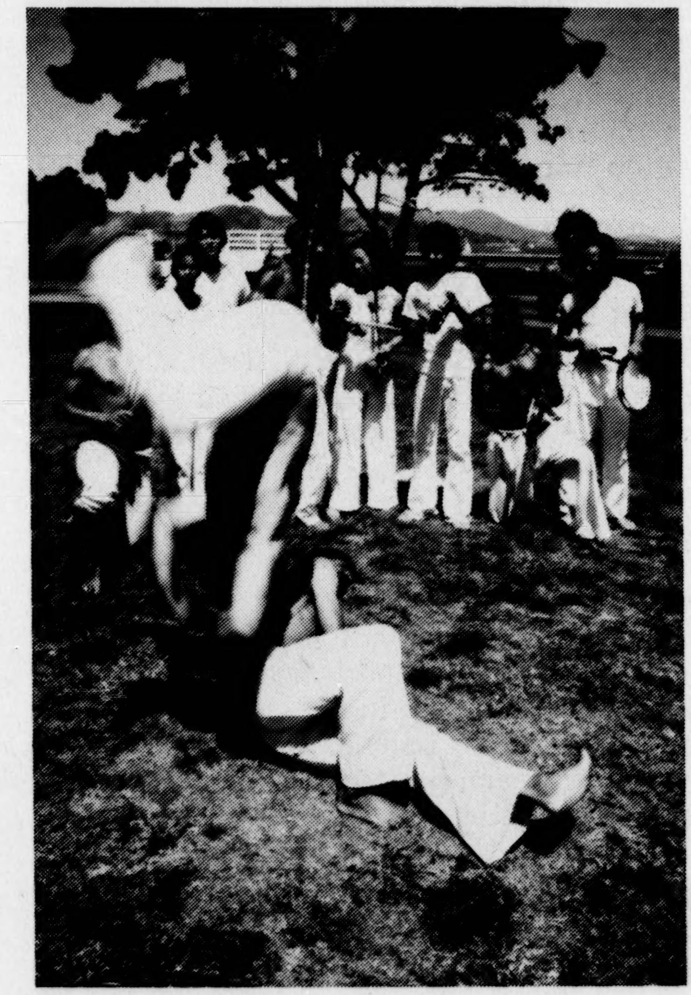
This was no ordinary manuscript. Even as I thought that, a chant arose and engulfed the room. The entire situation was transformed. I looked up to see the class — it was vintage California in the best sense: Spanish, Afro, Euro students all mixed in, surfer and hippie types with ethnic urban Bay Area males, more women than men, many of them dressed in Brazilian costumes and wearing *capoeira* insignias, several people playing *berimbaus*, the tall bow-shaped instruments strung with tire-cords and used during *capoeira*, as well as rattles and drums. They were in a circle with Bira at the head, and they were opening class with a prayer: "*Ie A Capoeria!*"

TOM WACHA

A kick from a handstand.

Only later did I realize that all the possibilities I had intuited were presented in that moment. And all I could think was: "Wait till they see *this.*" I wasn't even sure whom I meant. I guess I meant, "Wait till the rest of the country sees this next wave to come out of California." I looked down at the same page of manuscript:

> I want to see *capoeira* spread all over the world and my old city of Bahia, *capoeira*'s main fortress for so long, respected as its sanctuary. I want to see as many people playing *capoeira* as there are grains of sand on the beach of Amaralina. I want to see the son of the son of my son cutting the space of life in *rabo de arraia, mortal*, and fantastic *capoeira* movements. I want to see you facing the growth of yourself playing *capoeira*, comfortable and accepted into any *roda.*


TOM WACHA

The *capoeirista* must move close to the ground but never touch it in more than three spots.

The students were now leaping, turning cartwheels over each other, spinning, tumbling, walking on their hands. Top and bottom of their bodies reversed as they moved in graceful circles so swift it seemed impossible they could continue to dodge each other. I stood and watched. It was t'ai chi, it was reggae, it was **West Side Story**, it was **Tristes Tropiques**, it was Gurdjieff in France. On some other mythological plane, I was watching the beginning of the South American invasion, and I saw the ashes of Jonestown and the SLA transformed into a healing dance.

During the next several months I saw the many faces of *capoeira* in the Bay Area: Bira was organizing classes for children in the Mission Cultural Center in San Francisco, talking to their parents. He was performing with his students in the center of a park in Richmond, pairs of men and women shaking hands, moving into the circle, and then seeming to fly past one another with tremendous energy while astonished onlookers stopped to watch. A few weeks later at a Brazilian-party fund-raiser at the University of California in Berkeley, with the *berimbau* interrupting the *samba*, a troupe of costumed and bare-chested *capoeiristas* hurtled about the room. A month later, before several hundred mainly singles in a Saturday audience at the Jewish Community Center in San Francisco, Bira was simply a Latin singer, playing electric guitar and presenting his own contemporary originals amidst the *bossa nova, samba*, and *batucada*. Then the show began with a variety of Brazilian *Carnaval* dances and a brief drama in which a group of fishermen hauled in a single fish with a net while Bira sang a folk ballad backed up by his Corpo Santo band. The fish was actually doing a modified *capoeira* in order to look like a fish as he crawled along the floor behind the net. As the song ended, the net was abandoned, and the participants became men and women at the village market. Two men argued over a woman, and in a few seconds, *capoeira* began — men, women, and children in the circle, coming out in pairs to meet, Bira now with *berimbau* in hand, and Corpo Santo chanting in the background. Before the performance was done, a roller-skater with Rastifarian hair challenged the *capoeiristas* with a sparking cigarette lighter, leading to a clown episode in which he and the others chased and dodged each other in *capoeira* movements.

I have asked Bira what his goals are. Why did he leave Brazil? Why come to California? What will become of *capoeira* in the United States? Does he seek mainly performances or serious study?

"*Capoeira* could not grow in Brazil," he tells me. "It's a developing country, and they think everything good comes from the outside. So they prefer karate and judo. *Capoeira* is despised in middle-class circles because they associate it with poor black and mulatto culture. Too many *capoeiristas* just want to fight and learn martial techniques of any kind. In the United States there is the possiblity that *capoeira* could develop and change. Then it will come to Brazil in the only acceptable way: as a Yankee import." He laughs. "They'll say, 'If the Americans do it, maybe there is something to it. There, Bira

ONE woman student explains that capoeira has taught her to move down the street with awareness of all that is happening, to understand threats before they occur and thus to avoid them.

has gone and taken our Brazilian thing and given it to the Americans.' "

The situation with *capoeira* as a whole is similar to Bira's own development as a *capoeirista*. He describes the stages he went through:

"In the first level, the student plays without knowing what is happening. He is lost in space. He sees nothing. Not only do the movements of his opponent seem to materialize by magic, but his own movements are beyond his control. I call this stage 'Playing in the Dark.' "

After this, the student gains a primitive sense of the rhythm and movements, and this is called "Playing in the Water." It is followed by a sharp physical mastery when the whole form seems marvelously revealed and everything is possible.

"I reached this stage, 'Playing in the Light,' many years ago, training so intensely that I would lose eight pounds each session. I was a fighting machine, challenging my own limits, other *capoeiristas*, and martial artists of other styles."

This is the stage of *capoeira* today, as Bira sees it, and the reason he has brought it to America — so that Americans will help develop the inner art, and *capoeira* will come to understand its own depths.

"After four years 'Playing in the Light' I reached my limits and went into a depression. I had such good physical skills and such a strong attitude that I could not easily find challenging opponents. I had no motivation to train for so little possibility of physical and technical improvement. I felt stuck, as if I were facing a large stone wall. I could not see anything more in *capoeira* for me. So I went to business school and decided to outfit myself in a suit. I graduated four years later, got married, moved to Sao Paulo, and worked in a big company."

He spent three years without training or even hearing a *berimbau*. Then he awoke one morning back in Bahia and felt a transformation. The day was filled with light and breeze, and he was inspired by his roots. He saw *capoeira* and saw what he had missed. When he came back, he went into hard training and explored a whole new dimension of his own being.

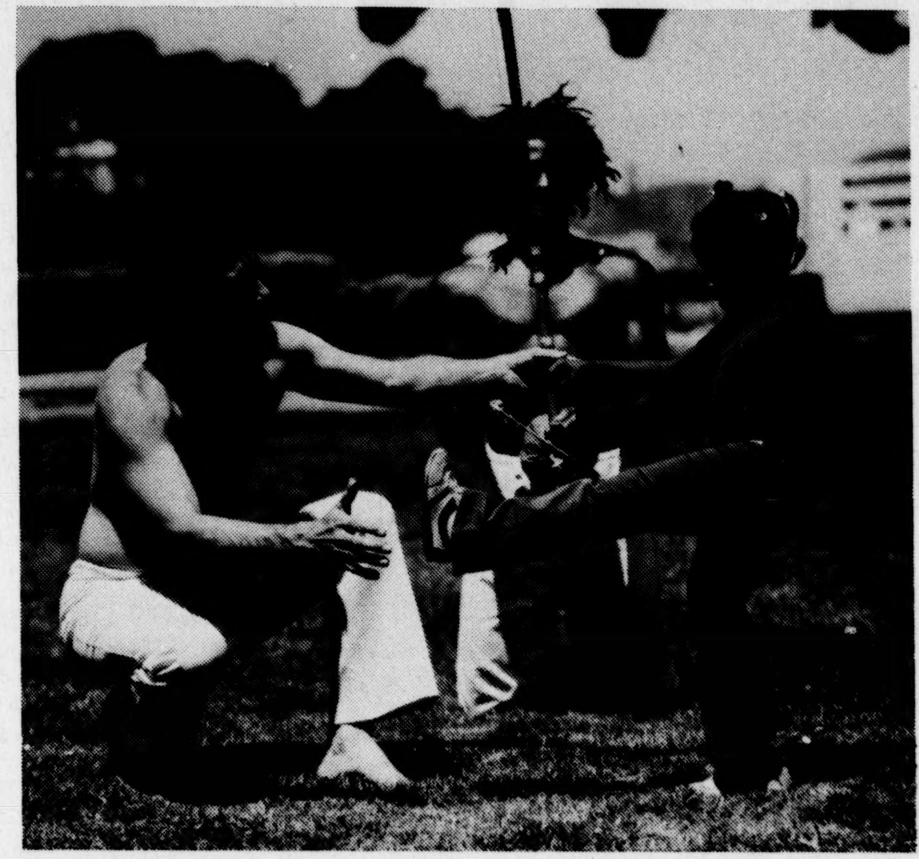
"I was then able to learn how to play in the fourth level, which I call 'Playing with the Crystal Ball.' I didn't care anymore about my strengths, skills, speed, or any other physical aspect. I simply began trying to read the opponent's mind, and set myself in the right place at the right moment."

At this phase, he understood he should leave Brazil. To progress further, he had to see *capoeira* in a larger frame, to understand the *berimbau* in the context of the universal rhythm of life. He studied music, he wrote plays, he explored all different aspects of *capoeira*.

"Then I reached the last level, which I call 'Playing with the Mind.' The opponent must do what your mind silently orders him to do. Such control has no other purpose than to help your opponent, even your enemy, to evolve and to reach a universal harmony through the *capoeira* way. There is a rhythm to life and to the universe. In doing *capoeira*, you can play to find it, to attune to it. As long as you are true to this rhythm, you cannot fight a false fight. The rhythm is joyful and gay; it is filled with life's imbalances, but it transforms them. It takes the unpredictability of the world and allows you to move *on* it."

The transformation of *capoeira* into an art and a means of self-knowledge has been gradual, with Bira Almeida its first spokesman, but the seeds were no doubt there at the beginning. If *capoeira* had not first confronted freedom from the despair of slaves and tried to ask, "Why has creation done this to me?," it would not be able to ask questions now about the basic nature of freedom and alienation in the modern world. If it did not test the possibility of total wildness and unrestrained physical power in a young lawless country, only to be subdued by the violence of the reaction, then it would not confront in us the feeling of danger that is present simply in being alive; it would not be able to transform violence into philosophy.

The first practitioners felt that the gods spoke through *capoeira*, but they needed immediate power far more than an understanding of nature. Perhaps they intuited the other dimensions; certainly they transmitted an art which contained them. *Capoeira* may have started as blind warfare, but it developed a spirit and a soul, and, as importantly, a mode of inquiry whose potential is just now being tapped.



TOM WACHA

Bira Almeida (Mestre Acorjeon) helps a future *capoeirista* work out a kick. Another student plays the *berimbau* in the background.

Angry people want to learn to hurt and to kill; the martial arts do not deny such teaching. But the true internal art turns the anger and alienation back on them and teaches them to recognize the core of all life's peril in themselves. *Capoeira*, through its unique rhythms, music, and traditions, has the possibility of transforming a small amount of the violence in this country — not a lot, but enough perhaps to make a difference in some people's lives.

One woman student explains that *capoeira* has taught her to move down the street with awareness of all that is happening, to understand threats before they occur and thus to avoid them. She adds:

"*Capoeira* is a mirror in which I stand before God and everybody. The reflection casts back my image, brilliantly, magnifying my weaknesses, my limits, and my frustrations. When I played with someone whose energy was totally into themselves and not concerned about me at all, I had to keep playing. I somehow had to find a way to flow in that situation. *Capoeira*, in giving me a mirror image, has forced me to see what I am, and to soften and blend my intensity into a flow which will allow me to grow."

Bira describes the almost inexpressible feeling:

"Many times I would spend hours playing the *berimbau* alone, letting myself travel deep inside my soul, discovering different shapes of my spirit, my weakness, my strength, the consciousness of being alive and in tune with the universe. I played *capoeira* in the dark of the night on the soft sand of Bahia's beach. Soon I was not able to hear the *berimbau* anymore; I began to feel the sound everywhere reflecting on the water, on the clouds, on the edge of the Earth, resonating inside my body, vibrating in each portion of me. In those moments I felt the full dimension of the *capoeira* music, the color of its sound. The *berimbau* can pacify the soul when played in melancholy solos; the rhythm is black and strong, a deep and powerful pulse that reaches the heart. It innundates mind, space, and time with the intensity of an ocean tide. The dense aura that emanates from the single musical bow slowly envelops you. Without your realizing it, the powerful magic of the *berimbau* has tamed your soul."

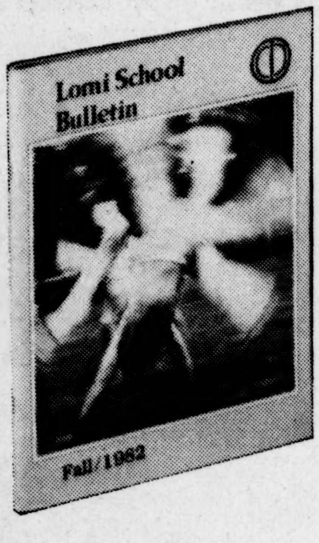
"So you're the philosopher of *capoeira*," I tell him.

"Not as an ego thing, though," he says, "not like a guru or god. They would laugh in Brazil to hear that Bira is conducting spiritual study of *capoeira*. It cannot be put into words anyway. I will simply make it possible for other people to experience parts of this universe that I have been in." ■

RECONCILE THE WORLD
MAKE HUMAN BEINGS ONE FAMILY
O SENSEI

Painting by Connie Smith Siegel
Words by Morihei Uyeshiba, the Founder of Aikido

Lomi School Bulletin



Lomi School Bulletin
Richard Heckler, Editor
$5 /year (1 issue)
from:
Lomi School Bulletin
1211 Lattie Lane
Mill Valley, CA 94941

When copies of this 60-odd page annual publication first came through the **CQ** *office one staffer judged it "quintessential California New Age, but well done." And so it is. With equal emphasis on bodily vitality, emotional health, and disciplined will, the Lomi School has been one of the main sponsors of an ongoing experimental synthesis of Eastern martial arts/bodywork and Western psycho-therapy. The* **Lomi School Bulletin** *reflects this, in part, with articles like "Aikido — An Adjunct to Psychotherapy," or "The Zen Way to the Martial Arts," but there's also a strong peppering of poetry, book reviews, and more personal pieces. The material is well-written, well-designed, and varied; in short, an able sampler of good ways to work on yourself. —Jay Kinney*
[Suggested by Marcia Anderson]

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Ki is defined as the "life force" or "universal energy" that is present in all living things and throughout the universe. In essence, when an aggressor attacks he directs his *Ki* towards his opponent. The Aikidoist learns how to first extend his own *Ki* and then guide the aggressor's *Ki* in a circular plane where he, through centrifugal force, finds himself off balance and helpless. In fact the Aikidoist can subtly "pick up" his opponent's *Ki* and, through what might be described as unconscious leading or suggestion, throw an opponent to the ground without even touching him. This sounds almost magical and when accomplished the Aikidoist can't help but laugh at such an effortless accomplishment. This feeling of enjoyment is frequently experienced during Aikido practice sessions; so very different from the intense competitive emotional atmosphere noted in other martial arts dojos.

The Gnostic Jung and the Seven Sermons to the Dead

When Gregory Bateson eulogized C.G. Jung's **Seven Sermons to the Dead** *(***NWEC** *p. 592) he noted that this "strange catechism" was "a sort of poetry, and therefore almost impossible to be reviewed and analysed in prose." However, had he lived to see the publication of* **this** *book, I suspect he might have changed his opinion.*

Dr. Hoeller, a gnostic scholar and Jungian therapist, takes Jung's **Seven Sermons** *and traces their parallels both in ancient gnostic myths and later in Jung's own psychological theories and research. Once you're past the somewhat overwritten and memoir-like prologue, the book is a lucid and exciting exploration of Jung's ideas and unorthodox spirituality. Hoeller builds a case for viewing Jung's lifework as a modern instance of "gnosis" (spiritual knowledge) with the* **Seven Sermons** *as a key text. Those who resolutely view Jung as a purveyor of occult pseudo-science won't be won over by this book, but for those of us who find Jung a wiser guide than Freud this book may open new doors. Highly recommended. —Jay Kinney*

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Jung said that only a poet could begin to understand him, and so it may be fitting to conclude this with some lines from the poet A.E., another wanderer in the strange land of Gnosis:

Out of a timeless world
Shadows fall upon Time,
From a beauty older than earth,
A ladder the soul may climb.
I climb by the phantom stair
To a whiteness older than Time.

The Gnostic Jung and the Seven Sermons to the Dead
Stephan A. Hoeller
1982; 241 pp.
$9
postpaid from:
The Theosophical
Publishing House
P.O. Box 270
Wheaton, IL 60189

The Gnostic Jung and the Seven Sermons to the Dead
Stephan A. Hoeller

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In order to restore the *pleroma*, or experience the fullness of being, we must know evil, which is not the same as doing evil. Evil-doers in the true sense are almost inevitably persons acting under one or several compulsions of an unconscious nature. It is thus their very lack of self-knowledge, and with it their lack of knowledge of their own evil, that forces them to do antisocial and evil acts. Unconscious content not brought into the Gnosis of consciousness is forced to live itself out by way of compulsive acts performed by the ego. As a latterday Gnostic classic has expressed itself, each human being is in truth his or her own absolute lawgiver, as well as his or her own reward and punishment. Such a statement can be recognized as valid only by persons who have emancipated themselves from the one-sided pursuit of moral perfection according to external laws and commandments. No longer seeking umbrage under the written law, such persons learn how to make conscious moral choices of their own design, winning individual victories and suffering their personal defeats according to the just constellations of psychic life.

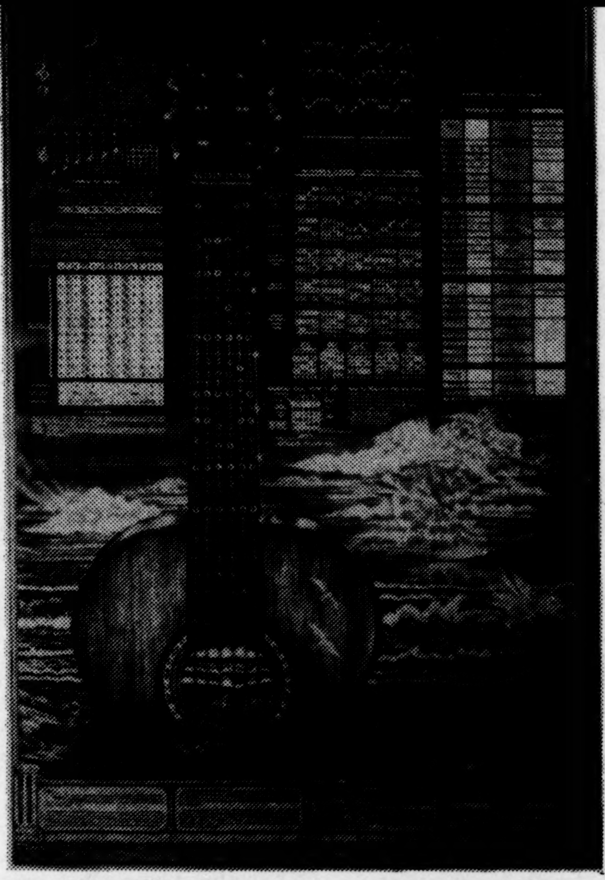
The Guitar Poster

This is the Rosetta stone of the guitar. In the poster's two-by-three-foot format can be found plenty enough decoding clues for the rookie string-slapper to know where to push those clumsy phalanges down on the fretboard and ***why*** *the relationships between strings determine the fretting patterns. The system taught here is basically the technique of understanding music through substitution of numbers (The Universal Key) for the do-re-me, A-B-C, way that guitar chording is usually expressed.*

The gum-snapping rock-and-roll professional will find help here too, because the movable chord-forms charts and the chord and scale tables should enable one to play just about any chord anywhere on the fretboard. Of course, it may take both hands to accomplish some of the fingerings.

Meant to be read by the square inch, The Guitar Poster supercedes the backs of most guitar books and fingering charts and is almost pretty too, with a full-scale fretboard, fully notated, surrounded by enough information for hours of digesting, and all this immersed in a good dose of unicorn-in-the-clouds California beach scene.

Even if you just sorta let your fingers do the pickin', it won't hurt to let your mind stumble along behind.
—J.D. Smith



The Guitar Poster
$6.50

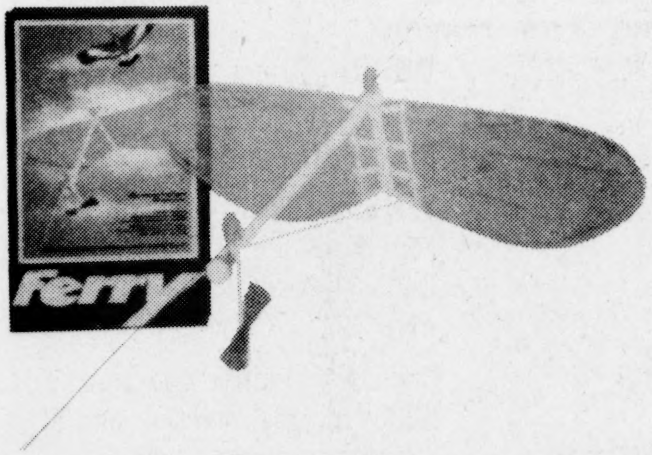
postpaid from:
Castalia Publications
Box 2503
Petaluma, CA 94953

Günther Models

From Germany, exceptionally classy ready-made models that fly, sail, and kite. *—Stewart Brand*

Günther Models

Nearest dealer information
free from:
Tide-Rider
P.O. Box 9
Baldwin, N.Y. 11510



Kite Lift

FERRY climbs up the kite line to the top and glides down again. It also can carry small loads to the kite and drop them there. Blister show-pack. $4

Cutter

This realistic model of a cutter performs excellently. Seaworthy and non-capsizable. With sailing instruction and adjustable rudder. Deck mahogany-wood varnished. Hull of high quality plastic. 4-coloured box. $32.50

Apprentice Alliance

Apprenticeships were once as common as employment agencies are today. They were based on certain principles which, though they may have gone out of fashion, still make a great deal of sense: things like mastery (of a craft or skill) and a recognition that learning happens by doing, especially in a close personal relationship between master and apprentice.

The Apprentice Alliance is working to bring apprentices together with masters. *—Rick Fields*

Though the Apprentice Alliance is based in the San Francisco Bay Area, other communities may find it a useful model. We'd be interested in hearing about similar programs around the country. *—Joe Kane*

The Apprentice Alliance
Information **free**
from:

The Apprentice Alliance
151 Potrero Avenue
San Francisco, CA
94103

•

Owner Builder Center

The Owner Builder Center is a hands on school for learning to build affordable personal housing. An apprentice would be involved in the total process of the organization including general office work, creating and setting up new systems of teaching, learning by observing and osmosis. Being an apprentice would give you a free access to classes while you are involved in helping to run the school. • 1 apprentice at any one time • min/max length of term: 2-4 months • min/max hours per week: negotiable.

UNCOMMON COURTESY

SCHOOL OF
COMPASSIONATE
SKILLS

SUMMER COURSES

OVER A YEAR OLD NOW, Uncommon Courtesy has established itself as a steadily useable service. Some come to it as "CoEvolution Live," a way to meet and interact with minds they've met in the magazine, such as Paul Hawken (economics), Michael Phillips (innovative ideas and small business), and Bob Fuller (direct personal world saving). Some come strictly for the compassionate skills, some because those same skills can be used in their own behalf. Some come to find out who else will be in such courses. They must be pleased, because they're forming a lot of alliances.

Part of the interest for us in fomenting the school is the sheer delight of inventing courses, usually around remarkable people (one we're working on is "Spirit in Design," two weekends working with Christopher Alexander, the principal author of **A Pattern Language**). Since we don't have to do the courses any particular way, we get to experiment widely with format. This quarter we've repackaged "Local Politics" into a weekend, and three courses formerly separate have been assembled into an amazing combination, "Triple Training." —Stewart Brand

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TRIPLE TRAINING

Three-day intensive workshop combining "Real First Aid," "Street Saint Skills," and "Fire Training"

PHIL FRANK
Phil Frank

The three kinds of emergencies most likely to befall yourself or someone you care about are: 1) Injury or acute illness; 2) fire in your home or a public building or nearby outdoors; and 3) street hassles. The skills to handle each we have taught before. During those courses we realized there was a lot of first-aid material in the street and fire training, and much of **real** first aid consists of the kind of calm-in-crisis taught in the "Street Saints" course, and fire is a special and pervasive danger that **any** emergency-preparedness course needs to cover in detail. (What do you do when your smoke alarm awakens you? You instantly roll off the bed onto the floor. The chemical gases in modern house-fire smoke can numb your mind in seconds.) So we figured, why not learn it all connected, the way it really is, in one long weekend, and use the knowledge for a lifetime?

The chief instructor for the "Real First Aid" sections is NANCY OLIVA, who teaches Emergency Medical Training at College of Marin and works as a registered nurse in the emergency room at Marin General Hospital. Chief instructor for the "Street Saints" sections is TERRY DOBSON, author of **Safe and Alive** (Spring '82 **CQ**), fifth-degree black-belt aikido instructor, and conflict resolution expert. The fire training is headed by GERALD MYERS, chief of the Beginnings Volunteer Fire Department, Briceland, California, and author of the survey "Community Fire and Emergency Medical Services" in **The Next Whole Earth Catalog**.

WHEN: 9 a.m.-5:30 p.m. Friday-Sunday, **July 8-10**, 1983.

WHERE: Yosemite Institute, Fort Cronkhite, Golden Gate National Recreation Area.

FEE: $180 (includes lunches and snacks). $230 (includes lodging and all meals from Friday noon to Sunday noon).

REGISTRATION: Enrollment is limited to 40. Registration deadline is June 28.

Each subject may also be taken separately:

Fire Training: July 8,
10 a.m.-5 p.m.,
$70 (lunch included).

Street Saint Skills: July 9,
8 a.m.-5 p.m.,
$70 (lunch and dinner included).

Real First Aid: July 10,
9 a.m.-5:30 p.m.,
$70 (lunch included).

CITY COUNCIL

PHIL FRANK

LOCAL POLITICS

Weekend seminar

The politicians who have the most power in our daily lives are the local officials, and they are the ones most responsive to our political activity. Retired State Senator PETER BEHR was a city council member and a county supervisor before he became California's most widely acknowledged "statesman." He is a superb teacher. During the weekend he will cover: 1) the extent of local power; 2) citizen lobbying [see p. 47 this issue]; 3) campaigning for office; and 4) serving in office.

WHEN: 10 a.m.-4 p.m., Saturday-Sunday, **July 23-24**, 1983.

WHERE: Yosemite Institute, Fort Cronkhite, Golden Gate National Recreation Area.

FEE: $75 (includes lunches and snacks).

REGISTRATION: Deadline is July 13.

BUSINESS AS SERVICE

Two-day bus tour

One of the most efficient, effective, enjoyable, and liberating ways of doing good is with a business. It is the only form of service that answers directly and solely to the served. It can be used to bring a community together, to introduce a new idea or even ethic, to support a charity, to provide income that satisfies as well as feeds.

"A sense of service makes a business more honest; a sense of business makes a service more honest." Highly successful examples of both in the San Francisco Bay Area will be visited by the rolling seminar, including Smith & Hawken Tools and **CoEvolution Quarterly**.

Tour guides are PAUL HAWKEN, cofounder of Smith & Hawken Tools, author of **The Next Economy** [Spring '83 **CQ**]; MICHAEL PHILLIPS, founder of the Briarpatch Network of "right-livelihood" businesses, author of **Honest Business [NWEC** p. 304], and **The Seven Laws of Money [NWEC** p. 308]; and Stewart Brand of **Whole Earth Catalog, CoEvolution Quarterly**, and **Whole Earth Software Catalog.**

WHEN: 9:30 a.m.-10 p.m. Thursday; 9:30 a.m.-6 p.m. Friday, **August 18-19**, 1983.

WHERE: Bus leaves from Fort Mason, San Francisco.

FEE: $160 (lunches included).

REGISTRATION: Deadline is August 5.

CREATIVE PHILANTHROPY

Weekend conference

The third of its kind, this conference will build on the insights and experience of the first two. Creative Philanthropy is emerging as a highly personal skill of considerable rigor. At its best it can be a pillar of heaven and a leading edge for the culture. At its worst it smells to heaven and paralyzes creativity. ("Thou shalt not tease. Thou shalt not jerk around. The quality of your word is worth more than the quantity of your money.") Amazingly enough, few personal philanthropists are aware of the range of technical options available — donor-advised funds, program-related investments, etc. It's a freeing range. For many people, particularly if their wealth is inherited, taking creative responsibility for their money is a kind of release. It is as empowering for them as for the people they fund.

Participants this time include PAUL HAWKEN, author of **The Next Economy** [Spring '83 **CQ**]; STEWART MOTT, maverick freelance public servant; DRUMMOND PIKE, Tides Foundation; BOB FULLER, Mo Tzu Project [Fall '82, Spring '83 **CQ**]; Two Grand Dames from the San Francisco cultural scene; and STEWART BRAND, of **Whole Earth Catalog, CoEvolution Quarterly**, and **Whole Earth Software Catalog.**

If you wish to participate, please establish that you are or are becoming an active philanthropist.

WHEN: Friday dinner to Sunday afternoon, **September 23-25**, 1983.

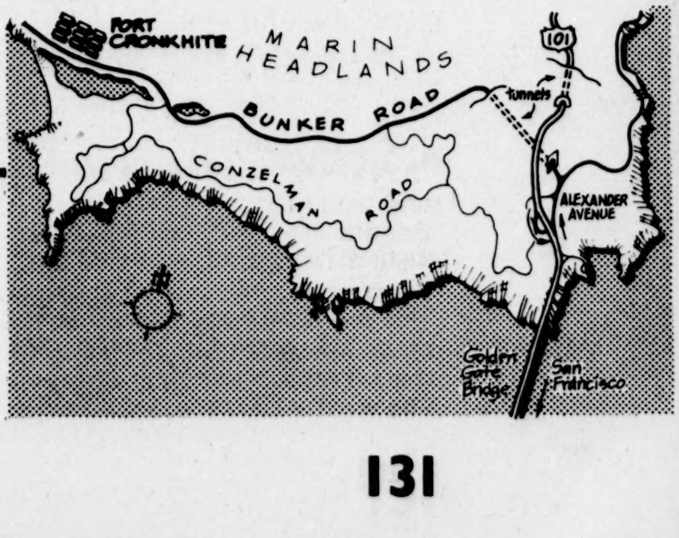
WHERE: Yosemite Institute, Fort Cronkhite, Golden Gate National Recreation Area.

FEE: $250 (includes all meals and lodging).

REGISTRATION: Deadline is September 14.

To sign up or request information, write: **Uncommon Courtesy**
Box 428
Sausalito, CA 94966

or phone:
Irmine Steltzner, (415) 332-6106, Monday-Friday, 10 am to 5 pm.



BACKSCATTER

Echoes from readers back to CoEvolution Quarterly

The Golden Meanies

Kudos for another excellent issue (Spring '83 **CQ**)! I do systems analyses for a living and was quite fascinated by two comments I will juxtapose:

"In a nuclear world one's own safety lies in neither being too weak *nor* being too strong." Robert Fuller, p. 123, regarding nations.

"It is common to regard the history of the evolution of life as a triumph of the fit over the unfit, of the strong over the weak, but . . . the theory of Darwin is a theory of limits. It was a generalization of the thesis of Thomas Robert Malthus and holds that only those species which take a proper tack in regard to the limited nature of the resources of this Earth will survive." Austin Meredith, pp. 36 and 40.

I could sum up by saying, with particular amusement in the enjoyment during the '60s of Blake's "The road of excess leads to the palace of wisdom," that the palace seems to be the Parthenon after all, and here we are back at Aristotle and the Golden Mean! For individuals, species and nations we have the same rule, that safety and survival involve being in neither the front nor the rear of the possibilities. If the Greeks had put their understanding of general philosophy into their ecology as well as their other activities, perhaps they wouldn't have deforested so thoroughly and therefore brought about their own downfall. Perhaps there is some hope for some general progress in understanding, after all, paradoxically (and Einstein said paradox and truth were inseparable) at the point of coming home to the most respected parts of our less-populated past.

Terence P. Yorks
Bellvue, Colorado

P.S.: Why does Austin Meredith use middle names for all the people in his quotations and fail to give his own?

People who love popple are . . .

About my article in the Spring issue — one of my main points was that often trees (especially long-rooted, nitrogen-fixing legumes like locust, carob, mesquite) are planted to restore worn-out or eroded farmland. But what can be planted to restore soil worn out by successive generations of pine? "Coast-to-coast people" was a nice thought, but it wasn't exactly what I had in mind.

I was thinking about the sight of coast-to-coast "popple." I used a slang term that is probably unfamiliar out there in Ecotopia. *Popple* is midwestern slang for any of that large family of poplar trees which are usually the first to sprout in a clearcut or burnt area. They grow almost anywhere and grow quickly. Some paper companies harvest them for pulp. They are a "pioneer" species and they (I'm thinking mostly of quaking aspen) have replaced much of the northern Great Lakes pine forest, including the national forests.

Popple are beautiful trees in their place. They can grow to huge sizes but are relatively short-lived, weaken as they age, and make soft lumber that does not weather well.

With such qualities, popple trees are not highly prized by midwesterners (except for grouse hunters), so the word *popple* carries a certain connotation usually intended to produce a snicker or giggle, as in "What you got in that heating stove? Popple twigs?" (Meaning it's cold in here.)

The image I was trying to conjure was a picture of a North American forest consisting only of "pioneer" species like popple. A corollary might be a farmer surveying a former pasture taken over by Canadian thistle and hawthorn shrub. Much as I like the sight of the leaves of a quaking aspen or tall cottonwood flipping in the breeze, that seems an appalling prospect . . . .

Pete Beckstrand
La Farge, Wisconsin

East/West trees

Dear **CoQ**:

It was with mixed feelings that I read Peter Beckstrand's article. On the positive side, I'm glad to see a discussion started in these pages about the climax hardwood/pine-to-subclimax-pine "type conversion" which is such a controversy these days. Conversely, it concerns me that casual and/or uninformed readers will extrapolate this issue nationwide and become unjustly suspicious of all "tree planting" activities. My forestry career up until two years ago was devoted to researching better ways of reestablishing ponderosa pine on burned areas in New Mexico; in this arid region that means government rather than industry employment . . . .

From the standpoint of Western silviculture . . . hardwoods are a minor component, quantitatively speaking, in the mountainous West; virtually all silviculture deals with climax or near-climax conifers. Thus the type conversion controversy is a nonissue (except with respect to ranching vs. forestry).

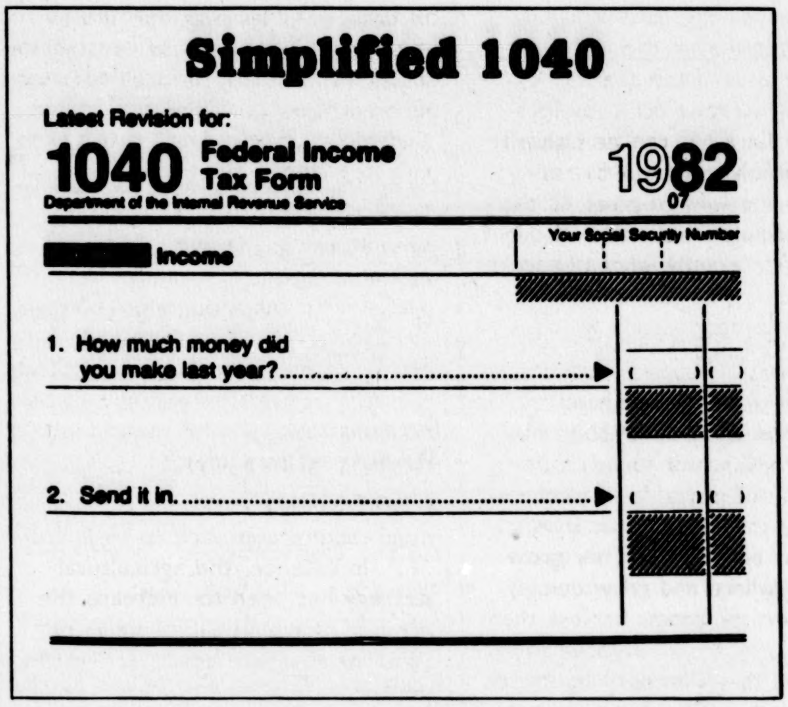
A valid issue, however, is the agri-monoculture approach to silviculture . . . . In essence, the agricultural strategy has been to: increase the number of grain-bearing stalks per acre; improve site quality by fertilization, irrigation, and pesticide application; and increase the proportion of harvestable biomass per plant. All three approaches require intensive genetic manipulation, i.e. plant breeding. Southern pine silviculture is based on this strategy, with tree planting being necessary to introduce genetically "improved" trees . . . .

Improving Western forest site quality is both impractical and uneconomic, and potential genetic improvement of yield (the first and third strategies) is relatively modest . . . . This improvement may be purchased with the loss of adaptation to long-term weather patterns with disastrous consequences. (Southern pine forests were reduced to isolated strips between fields during the cotton boom last century, hence have considerably less genetic diversity than Western forests; the milder and more uniform weather patterns also make local adaptation less critical). . . .

Western silviculture should focus on natural regeneration, supplemented where appropriate (e.g., to rehabilitate burned areas and poorly harvested areas) with artificial regeneration of trees from locally collected seed. Harvesting should be done to minimize soil disturbance, i.e. shelterwood rather than clear-cutting. If carried out within this framework, I see no reason why reforestation activities should not continue to provide tree planters with opportunities for ecological and moral satisfaction.

Michael Davault
Montezuma, New Mexico

White collar folk art



Simplified 1040

Latest Revision for:

1040 Federal Income Tax Form

Department of the Internal Revenue Service

1982
07

Your Social Security Number

Income

1. How much money did you make last year? .... ▶ ( )( )

2. Send it in. .... ▶ ( )( )

Sent by Bob Fleck and Jane Allison, Hermosa Beach, California

You could wear it backwards . . .

Spring is here, the crocuses are coming up, the two feet of snow has melted from the front yard. I decided last week to wear my **CQ** "libraries" T-shirt for the first time, not anticipating the chaos it would cause.

Perhaps you might get a feeling of the attention I was getting by clipping out the text of the T-shirt and sewing it to your crotch as a codpiece. If I wear the shirt out on the street it's as good as having a neon sign saying "I've got breasts, c'mon and stare at them for a while." Even my best friend felt funny reading the shirt while I was wearing it. I'm going to have to give it to my flat-chested husband or just wear it when I'm around the house, which rather defeats the purpose.

The whole text would be fine as a broadside or postcard, but I'd recommend that you pare the T-shirt down to a succinct "Libraries will get you through times of no money better than money will get you through times of no libraries." T-shirts, like bumper stickers, benefit from being concise.

The moral of the story is that when the medium is a 40B, the message is a bit different . . . .

Carol Maltby
Upper Montclair, New Jersey

"Fido" is Latin for "tasty"

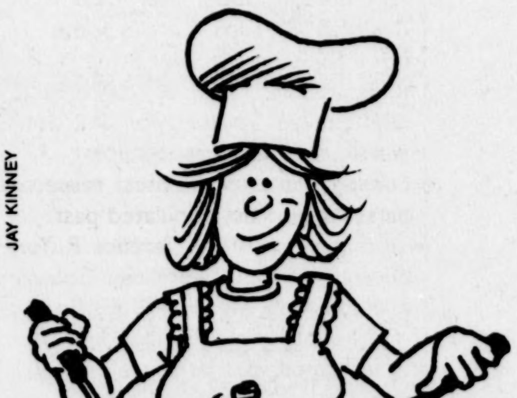
My husband and I had *dog meat for dinner* tonight, and it was so good — more than good enough to overcome my prejudices against it — that I felt I wanted to spread the word. Then I thought, "Who would print information on such an unusual subject?" — and **CoEvolution** came to mind!

Our area has been having problems with wild dogs (maybe tame?) harassing, maiming, and even killing livestock and wildlife. So this afternoon when we heard our goats yelling far off in the woods, Leroy grabbed his rifle and went to investigate. When he saw the dogs, two had ahold of our youngest doe, and he shot one of them as soon as he could do so without hitting the goat, scattering the rest.

Well, we had been wondering what was for dinner, and right there was a lot of pounds of young dog. Why not? I agreed to give it a try, feeling strange about being squeamish after all the ranting I've done about people who won't even *try* goat meat (our favorite) or even the milk! But at least I was willing to find out what this was like. We cooked it up like any other roast, and found leg of dog to be quite tender and delicious, somewhat like good beef. Our own dog and cats will benefit too, and we believe the skin will prove tough enough for footwear.

I want to make it clear that we're *not* dog haters, just practical. We wouldn't shoot the neighbor's dog for coming over, or a dog that was just lost, probably someone's pet, and causing no great trouble — that would be wrong. However, all this has made me think again of all the dogs throughout this country who, when no longer wanted for whatever reason, end up dying a slow death in the gas chamber of the county pound, their bodies thrown in an incinerator, all at taxpayers' expense. Wouldn't it be better all around for these animals to get a quick bullet in the brain and provide a family with meat? It wouldn't be good, organically grown food, but I suspect it would contain less chemicals than commercially raised beef or chicken. But when an adult dog is going to be killed anyway, think of how much less *wasteful* it would be for all that protein to be consumed rather than burned or buried. I have no hopes of turning the country around, but for anyone who could use some free, nutritious food, maybe it would be worthwhile to go to the local pound, leave a phone number and ask to be contacted the next time they have a dog scheduled to be destroyed — one on its last day. Then your mind could be at rest knowing it *was* going to die anyway. (It might be better not to say why you want it; let them think it's for the usual reason.) Or do as we did, and if a dog with no collar is becoming a dangerous nuisance around your place, put some fresh high-protein food on your table. It really is good!

Bon appetit!
Barbara



WOKKIN' THE DOG

Page from The Detailed Earth Catalog

. . . Well there I was feeling excited over the glimpses of possibilities that your catalog so well provides, but if viewing the Earth from space was supposed to lift our consciousness of life's interrelatedness, word doesn't seem to have gotten around very quickly in my neighborhood. More than a decade afterwards I was sitting trying to think on this to the constant accompaniment of smoke and horrible racket from up the valley where the Technology for Energy Corporation (much touted around here as the high-tech business model of the future) is starting a new plant building. So in they came to 43 acres of woodland and mixed second growth, bulldozed it all into heaps and burned it: Didn't try to use the timber, didn't concern themselves with the clouds of smoke that drifted up constantly for weeks, and leaving the whole site bare dirt, made practically no efforts to keep the creek, whose valley they invaded, from strangling with the silt. But these are intelligent educated people, and if the viewing of Earth from space is going to trigger some awareness, why the hell hasn't this group made any progress?

The waste and environmental degradation were to my mind criminal, but since I knew the land well, it was the loss of special places that troubled me most. There was a seven-trunked willow from whose branches over the stream the world always seemed a better place, marshy glades where I once came face-to-face with an overly curious red fox, woodcock dancing grounds, redtail hawks' nests and tangled ravines that always tugged out of hiding my boyhood dreams of secret worlds.

I realize that all things change endlessly; however, this was more than change. The fabric of the place was ripped to shreds, blotted out entirely, and there were plenty of people around who would justify this if for no other reason than because it conformed to a large scale, long-term land-use plan. Suddenly it occurred to me that this earth-from-space idea is ass backwards. The destruction upstream is just a dot from space and the things I loved there would show up not at all. The magic of place is invested in inimitable uniqueness, in intimate detail as well as the grand structure of things. To expect any broad-scale public event to substitute for the painful struggle to awareness in individual hearts and minds seems to me not only to dangerously champion public living in its conquest of private life but to cheapen the hard-won personal insights that in the end will decide the issue. I can scarcely expect NASA to raise my consciousness when I'm not even sure they've raised their own. Without a loving regard for the living texture of the Earth regarding it from the outside tends to induce an illusion of godlike self-sufficiency rather than the fostering interdependency which is the order of living.

Hoping this will strike a chord similar to the spirit in which it was written, which is not so much critical but rather springing from *an obstinate fascination with the wonders of the particular*, so easily disregarded when people begin to take broad general views of things.

Cary Chandler
Knoxville, Tennessee

A call for consideration

I worked seven summers behind an information desk, answering vacationeers' questions. The same two or three questions were asked repeatedly. How I wished people would have listened to the answer I had just given to the identical question.

I learned consideration for others who deal with lines of people. I started considering how I could act to uplift their spirits rather than wear them down with repetition. In checkout lines, I place my purchases so the prices are facing the cashier and are right side up. Not only does this reduce check-out time but the cashier often thanks me, wishing everybody would do that. This quick exchange of appreciation cheers us both up. It's nice to spend line-waiting time arranging an act of kindness.

I told this to a friend. She said she includes her account number whenever she endorses a check. It saves the appreciative bank teller from having to write it in. Perhaps everyone has discovered a specific way to show consideration. Surely anyone dealing with large groups of people has suggestions for how the rest of us can show them consideration. Why not ask your readers and compile an article from their replies, similar in format to your "Rules of Thumb" article [Fall '82 **CQ**].

This article would not contain general moral pronouncements. It would consist of *specific ways to show consideration* in specific, frequently occuring situations. We become what we practice. If we know more specific ways to practice consideration daily, perhaps we shall become more considerate.

A specific example: In conversing outdoors, never position yourself so the other person must face the sun's glare. Move to the side so neither of you need squint.

With due consideration,
Paul Krapfel
Irvine, California

Anonymous and anomalous

Ad for CoEvolution Classifieds

Warning to **CoEvolution** writers: Anything you write for **CoEvolution** may be reprinted in **The San Francisco Chronicle** Whole Earth Column without your permission. Don't expect to get much pay either. Beware.

D.G.
San Francisco, California

We couldn't run this anonymous ad because we couldn't determine if the writer was a subscriber or not (nor can we pay our usual $15 for running it as a complaint letter, for the same reason). In the hurly-burly of beginning the **Chronicle** *column — a surprisingly complex process — some contacts with prior reviewers were omitted. Our fault, and no excuse. Not done any more. Payment for re-used reviews is $15, which is the same as original use.*

—Stewart Brand

Unethical back issue

We all here are longtime subscribers to your magazine and greatly value its form, content, and philosophy. It is hard to criticize the ones you love but we were *outraged by* your recent catalog, in which you list *back issues at increased prices*. Without arguing the ethics of the rare-book market, with which we are all too familiar and with which we wrestle on a daily basis, we wish to protest on the simplest of grounds your asking huge prices for early issues. It is a matter of fact that as long as a publisher has copies of his publication that work is "in print"; as long as a work is in print it is in print at its published price unless the costs of reprinting a new edition force an increase. In the case of your magazine, it is not a reprint (we assume) but the original issue which is therefore still in print and thus — truth in advertising etc. — for sale at the price printed on the cover or advertised. To raise your own price twenty- or thirty-fold or more is at best highly suspect and at worst *possibly illegal.* Though we have no intention of pursuing *that* ugly course, some unscrupulous ambulance chaser might and we suspect you would be hard put to it to defend your action. Historically, as an example, in England in the 1960s one could still order Blackwood's back issues from the 1860s at the published price — an ethically sound if less profitable position. However, with your continuing interest in the thinking of the likes of Anne Herbert or even Paul Hawken, we wonder how you can justify such firsthand gouging to yourselves let alone to your public. Your response is eagerly anticipated, as are your next issues of our favorite modern rag — one of the few productions of this century in which we take any interest.

John R. Windle for W. & V. Dailey
Antiquarian Books
Los Angeles, California

Thanks for fascinating info. I notice no one complains when we sell back issues at **less** *than their cover price. I'm interested in your point but not yet convinced to change our behavior.*
—Stewart Brand

Great CQ readers

. . . The rule of thumb collection was given an enormous kick in the pants by your magazine and its amazing, alert, and clever readers. . . . Final tally:

Rule of Thumb article, Fall '82 **CQ**, number of responses: ABOUT 600.

Rule of Thumb report, Charles Osgood, CBS Network Radio, March 10th, '83, aired morning, noon, and evening, responses: ONE.

Didn't surprise me a bit.

Tom Parker
Alpine, New York

Tom Parker's **Rules of Thumb** *book will be published by Houghton Mifflin, October '84, with numerous* **CQ** *reader contributions.*
—Stewart Brand

Great CQ writers

I'm curious about the latest cover, showcasing Le Guin, Kesey, and Hawken — what I like best about **CoEv** is that it's primarily written by non-"writers." I hope to someday write as fresh and honest and impassioned prose as the nonpros who I sometimes find in your/our magazine.

I love **CoEv**.

Bonnie Henderson
Grants Pass, Oregon

"Love is just a word," therolinguistically interpreted

Dr. G. West, Editor
Journal of the Association of Therolinguistics
c/o **CoEvolution Quarterly**

Dear Dr. West:

I'm no scholar, and I expect your journal would not ordinarily be interested in printing anything translated from Domestic Dog, since the language is so well researched (one could say over-researched) and its basics are known to so many nonscholars. However, I am sending this to you not for the language, but for the subject, which is communication, and in the expectation that you may be amused, as I was, to find that a phrase from a popular twentieth-century human writer on the subject has entered Dog.

The piece was tendered to us by our usually polite ten- (then nine)-year-old-mixed breed male on the occasion of his biting his mistress for the first time in his adult life, under what he obviously feels were extenuating circumstances.

> Don't bite the hand that feeds you, my mother told me so,/
> But which is hand and which is food is sometimes hard to know,/
> Especially when it's roast beef, a rare and special treat,/
> The medium is roast beef, and all I hear is "eat!"
>
> My true love eats roat beef, the other one eats cheese,/
> And all I want is roast beef, I am not hard to please,/
> My choices are so obvious, to think would be absurd,/
> The medium is roast beef, and love is just a word.
>
> —Burger

Burger's facial markings make him particularly eloquent in the eyebrow component of Dog, so you can imagine (from the enclosed photo) with what longing and wonder he invested the phrase "roast beef." But there . . . I am sounding like the typical sentimental amateur Dog-speaker, whose kind has probably tried your patience all too often. Forgive me.

Nancy Schimmel
Berkeley, California

Photo by Claudia Morrow . . . who got bitten.

To: **CoEvolution Quarterly**
From: G. West
Re: Translation from Domestic Dog by N. Schimmel

We find this contribution to be of some interest. Free translation is always very risky, but the overliteral translation, with its overweening and implicit assumption that awkwardness is truthfulness, can do a great deal more harm. In this case the translation of tailwag into a galloping meter is surprising but not ineffective, and the expressiveness of the fourth line is an excellent rendition of whine. I am left with only one uneasiness concerning the rendition. The still photograph enclosed does indeed show Mr Burger's superb command of eyebrow, but it also shows a postural element not represented in the translation — that of latent guilt. It would be interesting to know whether the picture was taken before or after the incident, so that we could interpret it in the light of the knowledge that Mr Burger was worrying about the crime he was about to commit, or alternatively, worrying about the crime he had already committed. Perhaps the writings of De Sade and Genet could cast some light on the matter.

Sad-eyed mail

Is it possible to remove my name from the mailing lists you sell? I don't have any moral objections to this, I'm just really tired of the sad-eyed whales and dogs that now greet me daily in the mail with their plight. I'm also sick of the "This is the *very* last chance to save the Earth from " (whatever is the terror of the moment). The further pleas about saving this or that from Reagan before it's too late make me feel guilty. Hey, I didn't put the man in office.

I really prefer my Spencer Gifts and Giant Sweepstakes mail! Thanks,

Linda Bragg
Ann Arbor, Michigan

More hand cleaner

. . . . The *secret* is corn oil (or peanut or whatever is the cheapest generic brand you can buy). Pour a puddle into your hands, rub it in good, use a brush under the nails and it *dissolves* the car grease. Then squirt on a little dish detergent, rub well, and then rinse off. Your hands are *clean* and smell normal and your skin isn't terminally dry.

Peter Jones
Cambridge, Massachusetts

The gift moves on

It seems that **CQ** *readers like to act on ideas presented in these pages, not just discuss them. In fact this predilection for action may be one of the most gratifying common characteristics linking an otherwise fairly diverse group.*

When Bryce the Toymaker of Jonesport, Maine, read Lewis Hyde's "The Gift Must Always Move" (Fall '82 **CQ***) he was impressed enough with its message to send one of his carvings as a gift to author Hyde. We were impressed enough with the copy of the letter Bryce ran by us that we asked his and Lewis' permission to share it with you. The photo of the statue is lifesize. Bryce and wife Margaret Muir appeared in the Summer '81 and Summer '82* **CQ***'s with pieces on Disintermediation and Politics of Place in the Maritimes.*

(Lewis Hyde's excellent book, **The Gift:** *Imagination and the Erotic Life of Property, is now available. It incorporates and expands on his article in* **CQ***, with particular attention paid to the creative economics of Whitman and Pound. The Vintage trade edition is $8.95 postpaid from Random House, 400 Hahn Road, Westminster, MD 21157.)*

—Jay Kinney

Dear Lewis Hyde,

You have written of an economy of the imagination. My work is involved in such an economy, and your words struck home to me. Thank you for helping to clarify my thinking.

Perhaps the view of this material from my peculiar perspective may inform your thinking as well. I make gifts. I call myself Bryce the Toymaker, and indeed I began this curious journey eleven years ago by making little wooden trucks and boats and etc. as toys for children. I quickly discovered there was more to toymaking than imitating Fisher-Price.

Initially toymaking had two strong attractions for me. First, it is a splendid outlet for an overheated imagination. I never cared to manufacture a few profitable designs. The fun is in constantly posing and resolving new design problems. How to make a rhinoceros skip rope? Or a marching bear play trombone? So I make one-of-a-kind toys. And, second, I could share in the delight of others. The essence of a toy, perhaps, is that it brings out the child in all of us.

Very compelling stuff — but one must eat. In that other economy I was extraordinarily lucky. I was always able to sell everything I made. Of course I had to make a market, so my goods have never paid me middle-class wages; but I could sell the toys for enough to eat — and make more toys.

I started out selling on a street corner, and I can think of no better product-testing method for a young craftsman. I learned real quick about the structural limits of materials (in my case wood and string). The street kids busted a lot of those early toys. Equally important, I discovered what did and didn't seize the imagination of passersby. People are full of fantastic ideas, if you but ask.

Immediate market feedback continually informed my designs and reinforced my imagination. Some grand castles in the air were imagined on that corner. Within the innocent context of "toys" strangers are willing to daydream aloud. "Could you make a pig with wings?" So I began to make the fantasies of others as wooden toys.

Characters out of fairy tales. Images out of songs. Dirty jokes. Bad puns. Bits of technology. Private visions. And pure nonsense.

My first renderings of images, carvings if you will (done with a sander), were crude things to be sure. But I found that people would read all sorts of things into a crude carving in their hand. I began to appreciate the power of those small figures called "toys or ritual objects" in the anthropology museums.

People would say "O what a silly pig," when I'd thought it was a cat. So a pig it became. It didn't matter so long as that special ingredient — laughter — was there, permitting the child to come out. As my mastery of technique advanced, my cats looked more like cats, but the childlike quality of projecting imagination into these creatures persists. I'm still delighted, if less often surprised, when a person reads all sorts of personal images into the work.

And I wonder — with no small awe. This creation business is God's work and mysterious beyond the grasp of toymakers, for sure. I know I have the skill to make an object which a childlike imagination can bring to life. What excites me beyond reckoning is a sense of being a vehicle for passing a gift between others.

Over the past few years I've found that my best works, far and away, were those pieces specifically commissioned by one person as a gift for another. "Uncle Charlie smokes cigars, likes moose, and has a snowmobile." So I make a moose smoking a cigar riding a snowmobile. All the while the memory of the customer plays in my head. At some point in the process of conjuring up a design between us I get a strong sense of what the customer feels toward the intended receiver of the gift. It is that essence of the gift I seek for in my fumbling way. I don't know how it works — but it does. And these special gifts are almost invariably my best pieces.

The gift quality has been integral to the toys from the first. The very first toys I made were gifts for

young children in the family. Neighbors saw them and asked to buy, and I was under way. I've always given away toys, on the street corner and elsewhere: to start the luck, to little kids for pocket change, to the *right* person when I saw they couldn't buy, and as personal messages from me and mine. Bad business, of course — but the knack of what I do is a gift and "the gift must always pass." Yes — the goodwill returns, like the spirit of the gift in your fairy tales.

Sometimes I feel like a character in a tale. The little old toymaker. This sense of a role carries with it a responsibility to the spirit of the old tales. All very inchoate — but persistant. I'd rather not delve too deeply into this rich material with analytical tools. Magic only works so long as we don't "understand" it. Still, I might make some remarks in the context of your observations.

Gift giving and commercial exchanges are not necessarily antagonistic, nor mutually exclusive. The key is the spirit of the act.

The work I do as a toymaker is part of a giving, yet I am paid. Pricing my work has always posed a problem. When offering self-motivated toys for sale I never put price tags on them, preferring to haggle and gauge the market value. Now that my work is mostly custom gifts, the first question I ask in the design negotiation process is "How much were you thinking of spending?" The economic value of a gift may be its least important characteristic, but even gift makers must eat. Granted, I make poor wages by American standards, and I'm repeatedly told I'm giving my work away. But I make enough to get by. Yes, I'm giving of myself in the process, but I do get paid. And I'm rewarded far beyond my income. A fair deal, I say.

There's no question but that avarice devalues the spirit of giving. On those rare occasions when somebody tries to "take advantage" of me — beat me down below a subsistence price, etc. — the quality of the work plummets. Try as I might, I can't make a toy with the magic when the context is strictly commercial. Similarly I can't produce goods for stores. If I set out to make a toy "to make some money" it never comes out right.

But I carry the spirit of giving into my other economic activities and it enriches them, too. I have been sensitized to the subtle dynamic of reciprocity by a number of influences. I've always been bound up in a web of giving, surrounded by givers. My wife got her degrees in cultural anthropology and I shared her field work experiences. We continue to live in a maritime fishing village where the traditional economy depends on a strict egalitarian reciprocity. And there's the toymaking.

So I am hypersensitive to a ripoff, and tuned for reciprocity. The local garage owner lets me use his expensive tools and I pay him twice the little he asks in return. I buy fish off the boats at dockside prices and then add a little — usually in beer or such. Giving knits a community, and that can be giving in the context of economic exchanges. I buy local, and pay a little more, for the well-being of my neighbors — within the limits of my necessary subsistence. So long as the merchant isn't "greedy" — the worst thing you can say of a man in the maritimes.

Capitalism isn't so pure and unsullied by the spirit of giving down here — or anywhere, I suspect. Even Christmas, heaven help us, isn't entirely a celebration of Mammon. The true spirit of Santa Claus — the spirit of the gift — is alive under all that tinsel. If Santa were dead, my "business" would feel like so much getting and spending — greedy consumption, instant gratification. It almost never does. My customers all seem to be thoughtful, caring folks who want a gift which will convey the spirit of sharing (with a bit of laughter perhaps) — if not more.

You say the sale of commodities leaves no necessary link. On the contrary. Here in this community and in my toymaking *all* economic exchanges set up bonds of feeling.

I also wonder where the gift maker fits in your numerology. "The increase comes to a gift as it moves from second to third party, not in the simpler passage from first to second." I'm not sure how to discern increase in the economy of giving I share in. I am always aware of the magic which becomes manifest in a toy. Something out of nothing thanks to the gift of creativity. In that sense every toy is an increase and partakes of a wider spirit. Yet your dynamic would say that a gift exchanged only between two individuals tends toward equilibrium. I have no way of knowing, but I feel that the momentum of any heartfelt gift continues to travel. The material gift may stop, but the spirit moves on.

Moreover, there is a continuous act of creation implicit in a toy. The child in us projects imagination into a toy — we play — and that brings it to life. This creative expression of a larger spirit, is it not an increase?

No doubt we lack traditional rituals for passing on our gifts (unless you see Christmas as such). Even so, my experience is that Americans are a remarkably giving people.

It might seem we lack ritual objects to embody the spirit of giving which binds human communities (except wedding rings and those diamonds which are forever). Yet my experience with the carvings is that we readily project transcendent meanings into given objects, even in this scientific age. We continue to communicate our deeper thoughts and our sense of shared humanity by giving small gifts. All gifts are spirit messages.

A special gift continues to give long after it is given. Perhaps it would be better to pass on ritual gifts and spread their influence, but a given object *can* give increase without moving — as it continually renews our gratitude.

My gratitude to you for providing me a philosophical framework for this material. Thanks for the gift.

Bryce the Toymaker
Jonesport, Maine

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Gossip

Economics columnist Paul Hawken took a vacation from the subject and from the northern hemisphere with a month in Australia (his wife Anna is from there). If you require a hit of Hawken anyway, just turn on the nearest electronic medium. He's spending the whole month of June on the road and on the air plugging his book, **The Next Economy**. *After he recovers he'll be back to* **CQ**'*s pages.*

We went and raised the price of this magazine — from $14 to $18/year and from $4 to $4.50/single copy. The reason: after two years of doing everything else we could to cut expenses and increase revenue, there still was an irreducible $20,000 loss nearly every quarter. This quarter it's $53,000. Apparently we priced the product wrong. Now corrected. We don't expect **CoEvolution** *ever to make money, but it's got to pay its way to survive.*

Every now and then, on its own feather-brained schedule, **CoEvolution** *lays a golden egg. The* **Whole Earth Software Review** *and* **Whole Earth Software Catalog** *(see p. 110) may be such a one. Attentive readers will have noticed that half-time* **CQ** *editor Art Kleiner and I have been growing increasingly software-in-the-head of late. A couple of months ago we and agent John Brockman in New York and other conspirators to be named keyboarded together a proposal for a "Whole Earth Software Catalog." A New York publishers' auction was poised to happen when Doubleday unleashed a preemptive bid — $1.3 million advance, plus other attractions — which blew away the considerable competition. It's reportedly the biggest advance in history for a nonfiction trade paperback.*

The rest of New York asked itself, "What does Stewart Brand know about software?" A computer book writer smiled, "Congratulations on the great deal, hope you fall on your face."

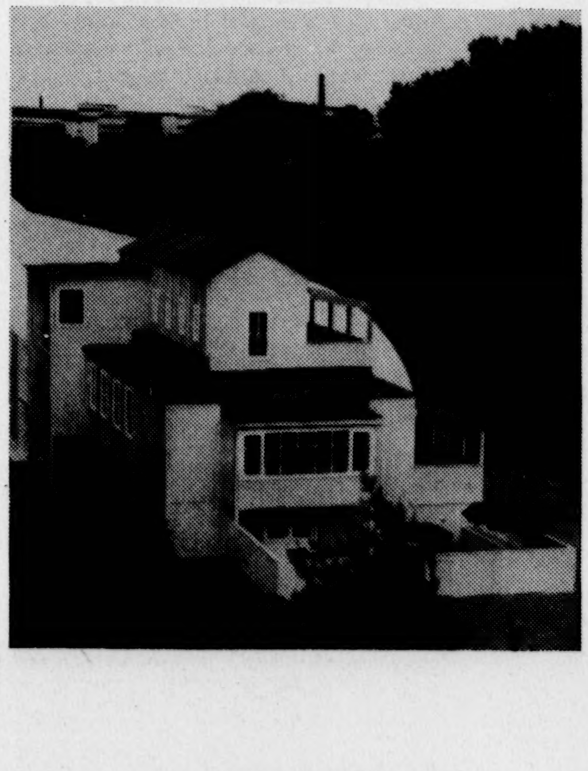
No doubt we will if we don't employ the advance ($567,000 now; ditto on delivery in 1984) adroitly on a kind of research we've never done before, maybe no one has. I've likened evaluating software these days to counting pieces of shrapnel of a perpetually exploding hand grenade, while some of the pieces are passing through your body. Obviously we are inviting the makers of personal computer software and hardware to send us reviewable material. Obviously we are inviting experienced users to participate as freelance reviewers in the project, paid modestly but attentively on publication. And we are doing some careful hiring and office expansion.

Richard Dalton is on as editor, distinguished and tall. For the last couple of years he's done a truthful newsletter on office technology, **Open Systems**. *Art Kleiner is editor-at-large. I'm editor-in-chief. Sheila Gadsden, young but experienced, is managing editor. Some of the research is coming through Tony Bové and Cheryl Rhodes, editor/publishers of* **The User's Guide to CP/M Systems and Software** *(reviewed on p. 104 of this* **CQ**). *Others have been invited and are deciding. The people at Doubleday we're dealing with are impressive; Phil Pachoda is their point man on the project. Much of the planning and research is going on through the EIES Network.*

All this hoopla does not mean less attention to our duties with **CoEvolution**. *It is the goose, honking, waddling, and bright gray, who produced the gildy egg and who is keeping it warm and safe. The egg has yet to demonstrate whether it can produce another goose. Speaking of that, how do you like the crisp new type in this issue of* **CQ**, *as well as the crisp editing by new half-time* **CQ** *editor Jay Kinney? (More of him next issue.)*

We've finally gotten around to offering by mail the "best book in the **Whole Earth Catalog**," *Chris Alexander's* **A Pattern Language** *(see inside back cover). Over dinner with him the other night we heard an amazing tale of the title character of his book,* **The Linz Cafe** *(rave review*

Christopher Alexander's Linz Cafe — Available.



*in Spring '82 **CQ**). It seems the Austrians are famous for construction project scandals, and Alexander's lovely cafe became one of them. He was supposed to be paid $20,000 and have the cafe turned over to him after the show it was part of. Neither happened. Someone else got the cafe, demounted it (it was designed to do that), and now the architectural masterpiece languishes in an Austrian warehouse. It could probably be bought for something around $7000 and shipped to the U.S. (or wherever) in about three shipping containers. Let Christopher Alexander know, via us, if you've got a plausible scheme.*

*Ahem, bad departure from protocol last issue when we deliberately concealed the authorship and pedigree of Ursula Le Guin's "The Author of the Acacia Seeds." We, including the author, enjoyed saddling the reader with the temporary responsibility of figuring out that the piece of science fiction was in fact fiction (or, you might say, in fiction, fact), but important credits were overlooked. Now therefore be it resolved that "The Author of the Acacia Seeds" and other extracts from the "Journal of the Association of Therolinguistics," reprinted in our last issue, is Copyright © 1974, 1982, by Ursula Le Guin, and first appeared in **Fellowship of the Stars**, edited by Terry Carr. Ursula, incidentally, makes a cameo appearance in "Backscatter" of this issue in the continuing guise of G. West, slightly stuffy president of the Association of Therolinguistics. She and it crave more contributions, via us, to the subtle study of nonhuman sentient art forms.*

*I'm a great fan of the **San Francisco Chronicle**, so it's been an honor and mostly pleasure to have a "Chronicle Whole Earth Catalog" half-page feature in it every Wednesday for the last ten months. But there's trouble in paradise. The Chron is not happy; we are not happy. Maybe the readers can help sort it out.*

*The feature is coedited by me and Joe Kane. Sometimes my voice is strong in it, sometimes Joe's is (such as his piece on "Socially Responsible Investing," reprinted and expanded on p. 90 of this **CQ**). The Chron would like more of me carrying on, maybe less of all the how-to stuff. We feel the **Chronicle** has enough flashy writers, especially the bloody wonderful Jon Carroll, and "access to tools" is what we do best.*

*Our charter, as we understood it, was to boldly go where no newspaper feature has gone before. We haven't done that very much, because even our routine stuff often turns out to be too risky. This week we had a piece on "How to Hitch a Yacht" pulled. Too dangerous. Likewise a book on freight-hopping. Too dangerous. Likewise, a couple of weeks back, a path-breaking book, **A Consumer's Guide for the Chemically Sensitive**, was pulled sight-unseen by the science editor because the whole field of clinical ecology he considered too controversial (we haven't reviewed the book in **CQ** because it's quite specific to the Bay Area). A feature on "Great Kids' Books" was pulled for reasons unknown. Each of these pieces took days to prepare.*

*Maybe it is simply structurally impossible to mix material from our kind of publication and mass press (500,000 readers daily). I think the **Chronicle** is to be congratulated for making the attempt with us. No other newspaper has picked up the feature, despite our efforts at syndication. The major remaining uncertainty at this point is how popular and used the "Chronicle Whole Earth Catalog" is. Our indications are strong and positive. The **Chronicle** editor feels otherwise, that there isn't much mail about the feature because there isn't much interest. He may be right. Readers: kill us or cure us.*

The address is: Editor, San Francisco Chronicle, 901 Mission Street, San Francisco, CA 94119,

—Stewart Brand

Two offers to CQ subscribers

*On our reader survey this winter we asked: "Where should we look for new subscribers?" Your most common replies were: among people our subscribers know, in libraries, on college campuses, and in community groups. We designed these two offers for you to help us reach people you know and libraries. If anyone has a good, inexpensive method for publicizing **CQ** on college campuses or in community groups, please let us know about it.*

***Offer 1:** If you send us up to three names and addresses of people who you think would enjoy this magazine, we will send each one a free back issue and a card naming you as their benefactor.*

***Offer 2:** If you give a gift subscription to any library, public or private, that does not already receive **CQ**, we will add a free extra issue on to your own subscription. Please indicate clearly which of your gifts are to libraries. **Note:** this offer is only good if you send us your mailing label!*

Both experimental offers expire September 21, 1983. —Art Kleiner

"Or Whole Earth Bookstore"

That phrase under access information in the **CoEvolution Quarterly** means you can mail order the item from the Whole Earth Bookstore, operated by the San Francisco Zen Center. Do not send orders for books reviewed in **CQ** or the **Whole Earth Catalog** to **CoEvolution Quarterly**; we sell only our own products. Send your mail order book orders to:

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All orders: Add $1 for one book; $1.50 for 2-4 books; shipping free (bookpost) with 5 or more books per order.

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CoEvolution Graphics

*This is the first issue of **CQ** to be set entirely on our new computerized phototypesetter — the result of the staff working hard to design and learn a new production system during the cool and muddy spring. In addition to standard keyboarding, two articles in this issue — Good Movies and the Index — were set directly and speedily through a telephone connection to our typesetter from the authors' computers. Plans to do lots of the **Whole Earth Software Review** by telecommunications are being discussed, and through CoEvolution Graphics, our freelance business satellite, we're doing outside telecommunications work: the Planetree Health Resource Center Catalog, for example. If you contact us at (415) 331-0363 or write us through **CQ**, we'll be happy to send you a detailed telecommunications guide as well as information on our standard typesetting. Rates are $35 an hour plus an initial set-up fee (for telecommunications), substantially lower than other similar services we know of. We appreciate the business, interest, and help we've received throughout this transition period.*

—Deborah Hamilton
and Kara Adanalian
for CoEvolution Graphics

CoEvolution/Point Financial Report Spring 1983

INCOME	**Feb, Mar, Apr**
Subscriptions, gifts & renewals	$ 62,154.83
Distribution	15,456.57
Back issues	4,446.28
Retaining & sustaining	1,471.55
CQ total	**$ 83,529.23**
Other products (shirts, books, maps, NWEC, etc.)	21,030.83
Unclassified ads	2,437.25
Mailing list rentals	9,247.52
Chronicle column	6,150.00
Uncommon Courtesy	16,233.10
Whole Earth Software Catalog	-0-
Outside typesetting service	40.00
Miscellaneous	7,039.00
Grand total	**$145,706.93**

EXPENSES	**Feb, Mar, Apr**	
Printing (36,000 copies)	$ 29,674.50	
Distribution shipping	1,339.96	
Subscription process & mailing	14,371.77	
Salaries		
Editorial	9,087.97	
Production	13,767.87	
Office	24,148.33	
Contributors	7,684.50	
Equipment rental & purchase	3,171.49	
Legal & professional	640.00	
Office & production supplies	6,615.11	
Postage	2,960.16	
Promotion & advertising	6,889.30	
Rent	6,108.66	
Telephone	2,926.00	
Utilities	1,318.09	
Misc. operating expenses	5,955.08	
CQ total	**$136,658.79**	**(net $ -53,129.56)**
Other products	3,564.17	(net 17,466.66)
Unclassifieds	-0-	(net 2,437.25)
Mailing list rentals	1,574.91	(net 7,672.61)
Chronicle column	5,421.91	(net 728.09)
Uncommon Courtesy	21,070.81	(net -4,837.71)
Whole Earth Software Catalog	4,660.74	
Outside typesetting service	55.50	
Grand total	**$173,006.83**	
NET GAIN (OR LOSS)	**($ 27,299.90)**	

POINT Financial Statement 30 April 1983

Assets	
Cash in bank	$ 8,221.82
Investments	16,936.70
Accounts receivable	
Distributors	23,334.65
Mailing list rentals	11,770.78
Inventory	
Back issues	$ 88,722.89
Other products	10,108.93
Random House inventory of **NWEC** (15,000 @ $3.19 each)	47,850.00
Liabilities	
Accounts payable	$ -0-
Subscriber liability	275,120.00
Random House (negative **NWEC** sales)	139,800.00

Thank you

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UNCLASSIFIEDS

The UNCLASSIFIEDS are a reader-to-reader service available to **CQ** subscribers only. They're designed to provide a cheap communications network for **CQ** readers and mild financial assistance to the magazine.

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To run a repeat ad, multiply your ad payment times the number of issues you want the ad to run. Send in that amount and we will print the same ad that many times.

Deadlines are two months before publication date. The next deadline is July 21 for the Fall issue; then October 21 for the Winter issue. Sorry, we will not take ads over the phone. Ads received after the deadline will be held for the following issue.

We print ads in the order received. "UNCLASSIFIEDS" — no categories. **CQ** subscription rates are $18/year ($21/year foreign and Canada). Please add this amount to your payment if you are not currently a subscriber. Order forms for subscriptions are at the back of this magazine. Mail ad and payment (made out to **CoEvolution Quarterly**) to **Annette LaBette, CQ UNCLASSIFIEDS, P.O. Box 428, Sausalito, CA 94966.**

OUR READERS WRITE:

"I placed a couple of unclassifieds, hand knit hats and Rubber Stamps. . . responses to the ads are encouraging and fruitful!"

"I have received several letters from railbike enthusiasts from a classified ad I placed in the Fall **CQ**. I got a good lead from Los Altos, and questions from Stevens Point, Wisconsin; Carthage, New York; and Jackson, New Hampshire. Should be interesting. Nice to connect with like minded folks."

"I'm a true UNCLASSIFIED fan: I met a new person here in Charlottesville from an ad they had run last issue ('Newcomer to Charlottesville. . .')"

BEER LOVERS Make great American and European beers at home. All natural. No additives. Save money. Complete Kits, Equipment and Supplies. Free details: Duane Imports, Dept. COE, P.O. Box C-500, Hershey, PA 17033.

TAPES OF Gregory Bateson: Several more cassette recordings are now available. Send long SASE with double postage for information. Dolphin Tapes, Hot Springs Lodge, CQ83, Big Sur, CA 93920.

BED & BREAKFAST 3 miles from Pt. Reyes National Seashore. Passive solar home located on bluff overlooking acres of pastureland — hills of Inverness Ridge beyond. House furnished with family antiques, worn oriental rugs, original artwork. 100's of miles of hiking trails, pristine beaches, horsebackriding by arrangement. 3 rooms, $40 ea. Thirty-nine Cypress, Box 176, Pt. Reyes, CA (415) 1663-1709.

RUDOLF STEINER & Anthroposophy. Impulses for cultural renewal: agriculture, medicine, architecture, education, etc. Free book catalog. Anthroposophic Press, Suite 2, 258 Hungry Hollow Road, Spring Valley, NY 10977.

PROGRAM YOUR own computer. Want to get the most from your computer? Are you tempted to write your own programs, but intimidated by the jargon and mystique? Programming is a creative art form, a rewarding craft, a practical skill. Whether you're an aspiring professional or an absolute beginner, I'll help you get the fastest possible results. In 90-minute personalized lessons, you work on the real-world problems that interest you, while building solid foundations in programming theory and technique. I am a supportive but challenging teacher, fluent in several computer languages. Lyall Morrill, (415) 647-8518.

FRIENDS/LOVERS — Discover "Contact High," the national magazine for New-Age singles. Details free (sample issue, $3). Box 500-CQ, Mendocino, CA 95460.

CALIF. DRIED Figs. Delicious, tree-ripened, hand-packed, no potassium-sorbate. A natural dried fig of superior quality and flavor. Try some and you will want more. For sample pack and information, send $3.25 to: Murray Taylor, Box 42, Greenview, CA 96037.

VAGABONDING IN THE USA: Ed Buryn's classic guide to our wondrous/wacky homeland. Maverick strategies/techniques for traveling cheaply/independently/holistically. "A must for would-be adventurers." —New Age. Revised 1983 edition, 432 pages, profusely illustrated, autographed, $12 postpaid. PO Box 31123, San Francisco CA 94131.

PROCRASTINATE NO more! SamGram is a new, easy, effective way to deliver your ideas to your elected representatives! It's a double postcard, artistically designed to increase the impact of your words. One card carries your message while the second, self-addressed card returns your legislator's personal reply. The SamGram booklet contains seven different, full-color, round-trip cards and a guide for identifying your own state and federal legislators together with their mailing addresses. Satisfy your impulse to express your opinion by always having these cards handy! Order your SamGrams now! Send $2.95 (check or money order) for each booklet to: Sara's Boy, Inc., Box 3148, Yountville, CA 94599. Satisfaction guaranteed.

PURE COTTON Drawstring Pants, shirts, skirts, jackets, kimonos, vests and much more. Deva functions as a cottage industry in rural Maryland handcrafting graceful clothes that are affordable. We also offer the Bach Flower Remedies, a versatile homeopathic first aid kit, books and many other delights for the mind and body. Our catalog and swatches are free. Deva CQO, Burkittsville, MD 21718.

ANY BOOK, in or out of print, ordered for you. Royal Oak Bookshops, c/o Anne, 207 S. Royal, Front Royal, VA 22630. 703-635-7070.

SINGLE PROFILE Nexus creates a network of 'Whole Earth' singles. Nationwide. Box 7484-A, Orlando, FL 32854.

COYOTE/TRICKSTER poster. Handsome, full color quality offset lithograph "Coyote at the Beach" by artist Elly Simmons. Rich colors, mythic. 20"x28", $18 postpaid, UPS. Specify home or office mailing address. Elly Simmons, P.O. Box 463, Lagunitas, CA 94938. Attn: Poster. Proceeds free artist for disarmament and environmental work! Open to barter.

HINDU-BUDDHIST Devotional Statues. Astonishingly beautiful, inexpensive. Catalog $1, Allan, Flint Hill, VA 22627-0281.

A PLETHORA of T-shirts! "Vegetables for World Harmony," Dragon, Dinosaurs, Whooping Crane, Born At Home, etc. Adults $7, children and infants $5. Jazz heroes on heavy weight shirts, $8: Charlie Parker, Coltrane, Dolphy, Mingus, "Bebop Lives." Send stamped envelope for flyer. All shirts 100% cotton. Bird Lives, P.O. Box F, New Lisbon, WI 53950.

HANDMADE SANDALS built by elves. Custom fit — guaranteed. Leather or vegetarian styles. $22 to $38. Catalog $1. Sandals, Rt. 1, Box 123CQ, Bunceton, MO 65237.

SHIITAKE GARDENING by Bob Harris. $3.00. Explains in easy to understand terms how the home gardener can grow black tree mushrooms in the backyard on logs. Shiitake plug spawn (300-400 plugs equivalent to 20-40 logs.) $15.00 Mushroompeople P.O. Box 158C, Inverness, CA 94937. Write for free catalog.

NEW ALCHEMY Institute welcomes you to Farm Saturday 1 PM May through September. Self-guided tours anyday during daylight hours. Group tours by appointment (call 1-617-563-2655). Directions to the Institute: Find your way to the Cape Cod Canal. Cross the Bourne Bridge, then follow Rt. 28 south towards Woods Hole. Exit onto Route 151 and proceed east toward Hatchville. Take the first right onto Sam Turner Road. Go 1.5 miles to stop sign. Continue straight through stop sign. NAI is ¼ mile beyond stop on left. Saturday tours are $3 — free if you become a member.

MANY THANKS to six CQ readers who become New Alchemy members after reading our ad in the Winter issue. We suspect that some CQ readers are reticent to join NAI because they think they can keep up to date on our work via WEC and CQ. It just ain't so. Join today — $35 to New Alchemy, 237 Hatchville Rd., Falmouth MA 02536 (mention CQ) — and learn about the Pillowdome Bioshelter, the Model Farm, the Superinsulated Auditorium, the NAI movie and our new book "Gardening For All Seasons."

YOU CAN'T afford $35? But you could afford a T-shirt? $7 to New Alchemy at address above. Specify blue, green; S,M,L, XL, child (6-8 or 8-10). Cotton. New Alchemy landscape on front with motto: "To restore the lands, protect the seas, and inform the earth's stewards."

AGROFORESTRY REVIEW, journal of International Tree Crops Institute, features practical articles on trees that yield food, fodder, fuel, shelter, etc. for soil and resource conserving perennial agriculture on marginal lands. Send $8 for four issues to editor: Gregory Williams, I.T.C.I., Route One, Gravel Switch, KY 40328

WRITER'S BLOCK — Our polished hardwood cube with the letters w-r-i-t-e-r carved in its six faces is a genuine literary talisman. $10 each. Harmon Road Hand Woodwork, Monterey, MA 01245.

END OF THE Road in the Ozarks. 1200 sq. ft. house on 40 acres. Solar/wood heat. composting privy. Gravity feed rainwater system. Good neighbors. $38,500. Owner financing. Tony Potochnik, Rt. A Box 162-C, Yellville, AR 72687.

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HAVE A few winged bean seeds. Free. SASE 40 cents postage. See W.E.C. p. 102. Bill Safer Tinian, Marianas 96950.

HAWAIIAN HOME tropical, serene. Sensitive humourous owner (31), cat (9) all available. Prefer spunky mature creative woman to share/enjoy with Howie SR 6377, Capt. Cook HI 96704.

DIESEL/ELECTRIC generators — continuous duty or reliable standby power. Don't be left in the dark! 3KW through 15KW. Dirt cheap! The Small Diesel and Generator Company, Star Rt. 3, Box 27, Yreka, CA 96097. (916) 465-2308.

CHINESE GINSENG ROOTS, red, approximately 80 roots per pound. $7/oz. $78/lb. Camel City Ginseng Co., P.O. Box 438, Walkertown, NC 27051.

SURVIVE CIVILIZATION. Transcend, prevent, and prosper beyond catastrophe. Grail Land Base and Gear Supply Company, Inc. offers confidential, comprehensive consultations and publications ($5-$20/month) on discreet survival stormproofing, ark-building, and evolutionary preparation paths, packs, land, and gear that helps you prepare for, even prevent, or at least manage responsibly in disaster. For no added cost, each full subscriber is entitled to the private use of 1/8 acre of our survival land, complete with physician care, in national emergencies and for catastrophe preparations. $7.50 for info. is applicable to subscriptions. Grail, Inc., Dept. CQ1, 22 Blue Hills Road, Amherst, MA 01004. (413) 256-8607.

JEAN THINGS — a selection of unique, individually handcrafted items, created and fashioned from denim and jean material. Ideal gifts, fun novelties, and just plain usefuls. For free brochure, send 20-cent stamp to Jean Things, 2003 Washington Sq., Cincinnati, OH 45215.

DULCIMERS & DULCIMER KITS. Meet the friendly instrument from Appalachia — easy to play, easy to build, with a sweet tone for lullabies, fireside evenings, front-porch afternoons. Inexpensive models designed for beginners 10-adult. Group discounts for schools, camps, senior centers, etc. Backyard Music, 509 South 44th, Philadelphia, PA 19104.

INTEGRATE WORK, Friendship & Political Values: Established rural community based on co-operation and equality seeks members. For free information ($2 donation appreciated) write: Dandelion Community, R.R. 1, Enterprise, Ontario Canada K0K 1Z0. (613) 358-2304.

EDUCATIONAL TOYS. Outstanding creative selection for children of all ages. Catalog, $2.00, refundable. Discovery Toys, 73 Putnam St., Buffalo, N.Y. 14213.

"NO HIDING PLACE From Nuclear War." These 5x7 stickers make fallout shelter signs tell the truth. Blue and white logo, dove, and "peace is our only security." Six for $2 OSFA, Rt. 2, Viola, WI 54664.

NEWSLETTER HERBS For Health and Profit. $2 & SASE to Herbs, P.O. Box 5113, Bisbee, AZ 85603. Guaranteed.

SEEK MAJOR MEDICAL/hospitalization insurance policy with easy claim procedure valid USA and abroad. Write Mark Bordsen, P.O. Box 577, Whitehall, MT 59759.

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ARE YOU A seasoned communitarian with experience as a farmer, small livestock manager, or auto mechanic? Interested in teaching & research? We're an established (6 years), 50-person, urban/rural intentional community in Vancouver, BC. We're committed to egalitarian relationships, concensus decision making, political action, & having fun. We have a 10-acre farm, 40 miles east in the Fraser Valley, in the primary stages of developing sustainable food production systems and complementary research/education faculty. If you want to make long-term commitments, and co-parent children in an extended family,please consider exploring membership in our community. Fritz Muntean, Fraser Common Farm Co-op, 1374-256th St, Aldergrove, BC, VOX1AO, Canada.

EUGENE SCALZO Call me, I miss you! Michael Brisson, 264 Averill Ave., Rochester, New York 14620, 716 244-8534.

GODDARD COLLEGE is looking for students. Newly reorganized and accredited, we seek self-directed students capable of designing their own course work and curriculum, students who do not need grades or exams as motivation to learn. Pursue a B.A. or an M.A. in the Liberal Arts in a personalized, student-centered learning community. We offer resident and off-campus undergraduate and graduate options. If you or someone you know seeks an alternative to traditional college education, find out more about us. Send for catalogue to Office of Admissions, Box 966, Goddard College, Plainfield, VT 05667.

HOME HEATING too expensive? Form an energy cooperative in your neighborhood. "Community Energy Cooperatives: How to Organize, Manage, and Finance Them" tells you how. 240 pages. Send $10.95 to: Conference Publicatons, 2000 Florida Ave. NW, Room 408, Washington, DC 20009.

MEDITATION, BUDDHISM, Zen arts. Complete selection of books, practice supplies and tapes. Many hard to find books. Write for free catalog: Naropa Institute Bookstore, Dept. CQ, 2011-10th Street, Boulder, CO 80302.

WOODED PARCELS. 90 minutes from NYC-New Paltz area; consciously and cooperatively apportioned by award-winning solar designer/resident. $3000 per acre. Contact M. Brady P.O. Box 1094, Menlo Park, CA 94025.

DO YOU PRAY For Peace, then pay for War? Think about it! Your taxes buy bombs and bombers, support Central American Death Squads. Thru War Tax Resistance, you can protest this use of your taxes. Many methods are painless. More information, support: D.J. Tennant 1640 Bowers Ave., Santa Clara, CA 95051. SASE please.

BOOKS FOR FAMILIES — unplug your TV! Hearthsong offers families an alternative to the media dominated culture. I've spent years seeking a strong, simple alternative for my family — now I would like to share what I've found with you. I've collected hard-to-find storybooks and picturebooks which nourish the young child's imagination thru stories and illustrations which are gently, yet deeply, enlivening. I also carry inspiring books for parents, books for your older kids and teenagers, books of poetry, songbooks, festival books, books for all seasons . . . need you more reason? playthings and natural housewares, too. Write for my free catalog. HearthSong — A Catalog for Families. P.O. Box 340C, Occidental, CA 95465.

HELP A FAMILY in need here in America. The Box Project gives you the chance to participate in a person-to-person direct way to care and share with a needy family in the rural south. For "your" family send stamped envelope to Box 435, Plainville, CT 06062.

WORLD'S FAIR: "Beautifully edited and printed" quarterly filled with unique and informative articles on past, present, and future World's Fairs. Send $1 for sample copy to Box 339, Corte Madera, CA 94925.

BOOKS: USED and rare mail offering. Very misc. "Potluck" catalog of around 250 different titles. $1. Brings most current. Molly Kirwan, Box 367, Meadowlands, PA. 15347.

VIDEO — Looking for somebody who is interested in communication by video tapes (U-matic favoured). Subjects: Art, music, sport and different kinds of social/political events. F.W. Bitzhenner, Heilmanns, Kamp 13, D-4409 Havixbeck West-Germany.

"EUROPEAN" COEVOLUTIONIST LADY with American Past interested in finding similarly bi-cultural man for co-evolution-a-deux, integration of the sacred and profane with knowledge, intuition, and lots of laughs for a "lifetime burning in every moment." Susan Oehl Scharwiess, Ulmenallee 20, D-1000 Berlin 19, W. Germany.

SOCIAL ECOLOGY Summer Program. July 15 thru August 5, 1983. The Institute for Social Ecology, formerly associated with Goddard College, is resuming its program in social ecology in conjunction with Burlington College, Burlington, Vermont. This program will focus on crucial issues of ecological breakdown and its relationship to social decay. The intensive 3-week residential summer program will explore five major areas for ecological and social reconstruction: ecological food production (agriculture and aquaculture), social theory, feminism and ecology, holistic health and nutrition, and alternative technology (solar energy, passive solar building design). 6 college credits. Distinguished faculty and speakers will include Murray Bookchin, Dana Meadows, Daniel Chodorkkoff, Ynestra King, Dennis Meadows, Peter Barry Chowka, Grace Paley, John Richardson, Dave Dellinger, Samuel Kaymen, Stuart Hill, and others. For brochure and further information write: Box 89, Plainfield, VT 05667. Call Gloria (603) 675-2230.

PHYSICIAN ASSISTANT, board eligible, seeks intelligent, caring physician with whom to practice. I speak Spanish. John Benecki, 510 20th Street, Lawrenceville, IL 62439.

READY FOR THE COUNTRY? Temporary workstays on organic farms in midwest. Variety of homesteads/time periods. Sativa, Box 1892, Evanston, IL 60204.

CHOICES. That's what Omega is all about. The arts. Social action. Holistic health. Psychology. Spiritual studies. Offering weekend and five-day courses, June 25 to September 5. Call for a free catalog (914) 266-4301. Or write Omega Institute for Holistic Studies, Lake Drive, RD 2, Box 377-X, Rhinebeck, NY 12572.

ECOLOGICAL PEST MANAGEMENT? Read the IPM Practitioner. Eleven issues, $15/year to CQ readers. Write, IPM-P, Rt. 2, Box 28A, Winters, CA 95694.

RIVER LIVING: ½ mile frontage on Southern Oregon wild river, 25' waterfall viewed from comfortable 4 bedroom home on secluded 24 acres. Year-round creek, large greenhouse, garden, guesthouse, 12V system, much more. Suitable for permanent home, vacation retreat or small conference center. For sale $240,000 or seeking others to share ownership. For details, photos, write Salmon's Leap, P.O. Box 6448, Brookings, Oregon 97415.

DIAMONDS AND OTHER precious and semi-precious stones. I sell them in any quality you wish at disintermediated (low) prices. Tell me what you want and I'll give you a quote. Purchase after inspection. I am also a gold- and silversmith with 15 years experience so I can set your stones. Workmanship guaranteed unconditionally. David Clarkson, Box 772, Marshall, CA. 94940. (415) 663-1480 anytime.

COMPUTER SERVICES for Craftsmen: Let a computer do your mailing labels, mailing list maintenance, personalized mass mailings or other drudgery best done by machine; cash or barter. Nik Mistler, P.O. Box 31560, San Francisco, CA 94131. (415) 681-3846.

RARE ISSUES of CQ — John Moir, 307 Marnell, Santa Cruz, CA 95062; (408) 458-1494.

TRY ON MY Holographic Glasses and see how the world around you is a large-scale rendition of the one inside you, and how a minor adjustment inside is a major improvement outside. Send me your exact time, date and place of birth. I'll use this with the mathematics of astrology to map out your vital rhythms and reveal the peaks in your potentials. Then I'll send you a big, fresh bouquet of images, metaphors and concepts you can use to reshape your thinking about yourself so your thoughtways are serving as channels for even your highest potentials. I have 13 years' professional experience in the field in New York, Toronto and Atlanta, am a Phi Beta Kappa graduate of Rutgers University and am 40 years old. Having recently "retired" to the Southern Blue ridge Mountains, I've more time now for this long-distance consulting which comes to you on personally recorded audio cassettes running 2½ hours minimum. Send exact birth data with $50 to H. Miller, Tumbling Waters, Route 2, Box 2330 Clayton, GA 30525. Your money refunded if not fully satisfied.

SINGLES MAGAZINE sample $1. Box 880-(V2), Boynton, FL 33425.

AMNESTY INTERNATIONAL T-Shirts. Show your concern for human rights. These 100% blue cotton tees display the words Amnesty Internatinal encircling the organization's symbol: a lit candle surrounded by barbed wire. All profits go towards the work of Amnesty International USA group 97, presently trying to free "adopted" prisoners of conscience in Czechoslovakia, mainland China, and Iraq. Send $7pp per shirt (and specify size: x-large, large, medium, small) to: AIUSA 97, Murray Hill Station, P.O. Box 58, New York, NY 10156.

HOME BEERMAKING! Tastes better, costs less. Free Comprehensive Catalog/Newsletter. William's Brewing, Box 461-Q, Oakland, CA 94604.

HOMEMADE SPIRITS! Kahlua, Irish Cream Whiskey and three herbal liquors. Quick, simple recipes. SASE and $2. O'Shea, 2910 NW Hayes, Corvallis, OR 97330.

HELP WANTED: Landskeeper/gardener/forester needed to reside and work on magic Patagonian Estancia. Must be extremely self-sufficient, pleasant, and professionally capable. Spanish helpful. Resumes/references to AKC, High Island Ranch, Box 71, Hamilton Dome, WY 82427.

SINGLE PARENTS: Information on learning, traveling, camping, housing and more. No one too old or too young! Single Parents Network for Washington, D.C. area, (202) 338-8163.

SIMPLE LIVING gardener/philosopher/sculptor (male, 41, lean, 6'1", blonde) wants/needs gentle, slender female partner. SASE & photo. Adam Turtle, Resident Steward, Nobody's Mtn., Copeland Cove Rd., Livingston, TN 38570.

SOFTSHOES. CUSTOM MADE to each of your feet in heavy, very soft, supple leathers. They are resoleable for years of service, and are super comfortable. Boots too. From $75. For info: Softshoes, 2535 NE 13th, Portland, OR 97212.

PRACTICE PERSONAL PEACEMAKING: We offer mediation services and training in conflict resolution. Send SASE for brochure to Kelsey Miranda Associates, Box 10796, Stanford, CA 94305, (415) 322-4053.

BORED BUREAUCRAT seeks hard job. Gov't contracts asst. wants challenging position in SF Bay Area having as little to do with Reagan Administration as possible. Experienced word processor, talented writer, comfortable though untrained on computers, energetic. 4451 California St., San Francisco 94118.

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SPECIAL OFFER on Kay Peterson's books: "Home Is Where You Park It" is a must for anyone interested in RVing. "Survival of the Snowbirds" tells how to live rent-free all year. Each book is $8.95 and has a money back guarantee. If you order both, pay only $15! Send to Kay Peterson, c/o Special CQ Offer, Box 2870, Estes Park, CO 80517.

MAN (34) CARPENTER, dog musher, live in semi-isolated situation in the mountains 35 miles from the nearest village. Looking for a woman interested in an outdoor lifestyle. Please send photo with reply. Mike Schieber, c/o Jack Herbert, SR No. 20146C, Fairbanks, AK 99701.

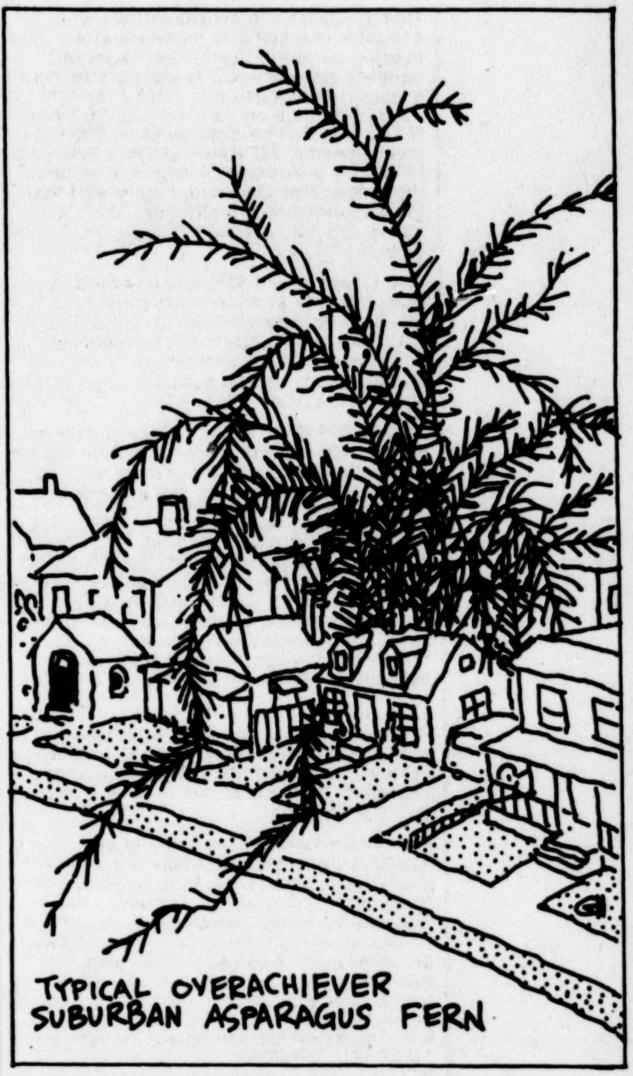
NATUROPATHIC MEDICINE — the traditional ecological approach — provides safe, person-centered, preventative and remidial health care. The Institute of Naturopathic Education and Research at OCNM offers a four year, clinically oriented programme providing eligibility for licensing as a naturopathic physician. Curriculum includes Naturopathic Diagnosis and Therapeutics, Homeopathy, Herbology, Nutrition, Metabolic Therapies, Public Health and Ecology, Acupuncture, Psychology, Body Work, Clinic. Courses commence September 5, 1983 for those with appropriate academic prerequisites. Apply now. Send for calendar to OCNM 43 Benton Street, Kitchener, Ontario, Canada, N2G 3H1. (519) 578-9000.

SOUTH AMERICA: OVERLAND! Customs, pleasures, routes; detailed maps. Bound, revised edition $2.50; Benecki, 510 20th St., Lawrenceville, IL 62439.

SPECIAL CATALOG — FREE! "Feeling good" products for the handicapped, disabled, elderly. Unique, specially designed self-help and daily living aids. Everything for comfort and convenience. In a wheelchair? Deaf? Arthritic? Know anyone who is? Great gift ideas too! Money-saving certificate with free catalog. Handi-Aid, Box 245-X, Agoura, CA 91301.

NIKOLA TESLA'S autobiography, virtually unavailable since 1919. Our 111-page reprint includes an important new introduction and all 17 original illustrations. Quality paperback, $7.95 postpaid. Hart Brothers, Box 205-F, Williston, VT 05495.

CHINESE BRUSH MAGIC. Experience the silent music within yourself through the magic of the chinese brush. Chinese calligraphy is the art of writing characters with Chinese brush and ink. Calligraphy is often called silent music. Through the dance of the brush, the calligrapher conveys his ch'i, his inner spirit. When strokes are used to express the ch'i of natural forms, Chinese painting is created. You can learn to read and brushwrite the words of Lao Tzu — in the original chinese — during a three-day intensive workshop. After learning the basic techniques of the Four treasures of Chinese calligraphy-brush, ink stick, ink stone, and paper, you will brushwrite passages from the Tao De Ching and other classics of Chinese wisdom. The original meaning of these ancient texts becomes clear through direct experience with brush and ink. The scenic beauty of Tao Shah Ranch, a Chinese cultural center, provides the perfect setting for this unique learning experience. In the profound serenity of our remote mountain retreat, you can open your heart-mind to the eternal wisdom of sacred Chinese thought. The three-day intensive workshops are scheduled for the second and fourth weekend of each month. We will also conduct workshops on the July 4th and Labor Day weekends. Advance reservations are required for all workshops. The fee for the workshop is $200. This includes your lodging and all meals in addition to instruction and your own set of the Four Treasures. For reservations, please write or call Tao Shan Ranch, Star Route No. 2280, Bradley CA 93426. (805) 472-9234.



GARY HALLGREN

TEXAS CQ SUBSCRIBERS interested in regional/bioregional networking, the Texas Community Improvement Network (TEXCIN) is designed to help you connect with ideas, people and projects within your local community and throughout the state. For more details, please send a No. 10 SASE to Community Innovation, Inc., 7490 Brompton, Suite 123, Houston, Texas, 77025.

EXPERIENCE GINSENG! For health, stamina, vitality. Revered in China for 5000 years. Catskill Mountain Wild Ginseng offers the highest quality American products, naturally woods-grown, no chemicals added. Sampler with whole root, bottled extract, book "About Ginseng" $10. Satisfaction guaranteed. Catalog free! Write: Ginseng, Box 245-X, Agoura, CA 91301.

"CLASS AT BARGAIN Price" says Stewart in CQ Spring 83 pg 145. Catalog showing 50 great models for $1 in stamps. The Paper Model Co., 708 Mildred, Philadelphia, PA 19147.

BED & BREAKFAST: Pocono Mountains 4 miles off Route 80. Beautiful stone home furnished with antiques $50 double $40 single. RD 1 427B, Cresco, PA 18326. (717) 839-8206.

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HEALTH FOODS Mail Order: Supplements, Vitamins, Herbs. Free catalog. Hatch Natural Products, 746 Germanna Hwy., Culpeper, VA 22701, (703) 825-4302. We also wholesale health foods — (natural and organic) grains, stoneground flours, beans, nuts, dried fruits, condiments (salt free, sugar free), pastas, cereals, juices, Japanese products. Please send $1 for catalog.

HOT BANANAS? No Thanks! No Nukes Either! Anti-nuclear and environmental designs — high quality clothing. Free catalog! Screenfreaks, Box 278CQ-3, Lansing, NC 28643.

MAPS FOR MAP Fanatics! Eagle Eye supplies maps for travelers. Our latest catalog is $1. Special orders too! Write today to Francis Stanton, Eagle Eye Maps, P.O. Box 30917, Seattle WA 98103.

BICYCLING EDUCATOR, experienced cyclist wants work in driver education and licensing, traffic engineering, facility planning, new product development, technical writing, computing. Reward for job leads. L.A.W., Box 1798, Corvallis, OR 97339.

TRADITIONAL BERBER PIPES. Hand carved wood with cool ceramic bowls. Enjoy a natural smoke for only $4.50 each, postpaid — 2 for $8. Pehrson, Box 160, Monte Rio, CA 95462.

GREETINGS! BOB STERN is my name (40/buddhist/Libran). Experienced aide, assistant, companion, natural foods/macrobiotic/vegetarian cook, popular recorded music expert, reference searcher, trained driver (by Rolls Royce in London. My service is comfort and safety on any type of motorcar). I entertain/teach relaxation through dance therapy. I am seeking an informal live-in situation. Free to travel, well-traveled. I can relocate anywhere on beautiful Mother Earth. The right environment is as important as the right salary. excellent references. How may I serve you? Box 5831, Santa Barbara, CA USA 93108.

COUNTRY PARADISE: Ideal for community; can be subdivided. Eighty acres rolling countryscape. Streams, waterfalls, power generating potential. Tranquil, secluded. Close to small city minutes to U.S. border. One hour to Vancouver. Mountain, sea views. Paved road. Price negotiable. Owner financing. Easy mortgage. Write 37067 Dawson, Abbotsford V2S4N4 Canada. Phone (604) 853-8628.

COTTON FUTON INSTRUCTIONS. Make your own futon in one evening for less than ½ retail cost. It's fun and practical! For detailed instructions including 8" tufting needle, send $5 to Cotton Beds, 1353 Cooper Rd., Sebastopol, CA 95472.

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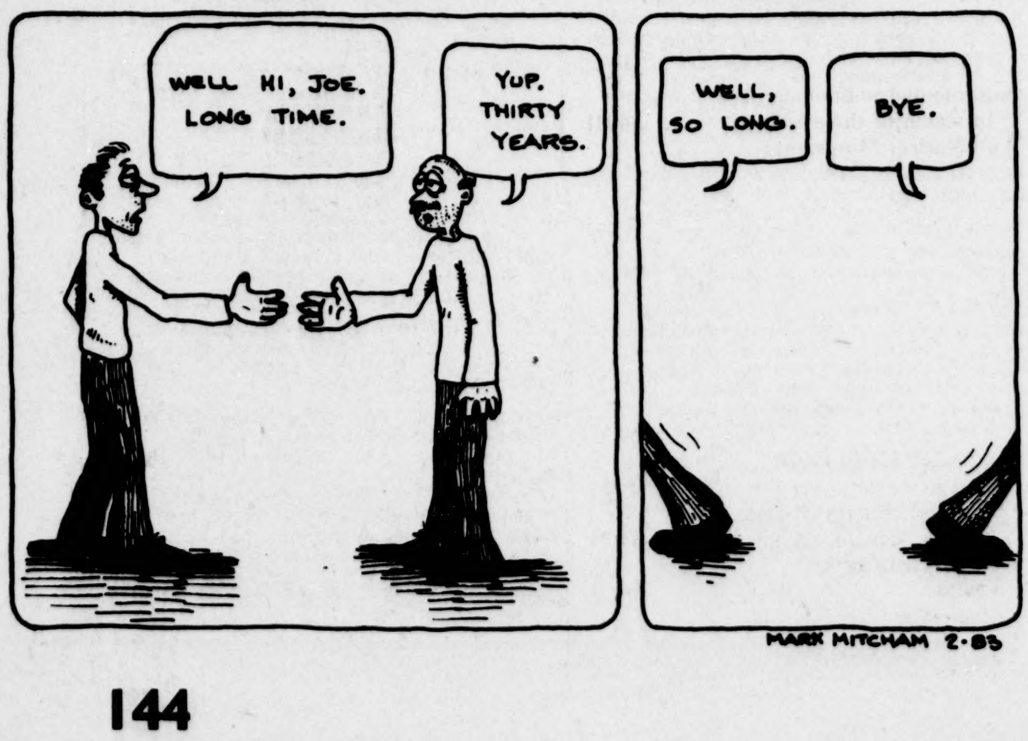
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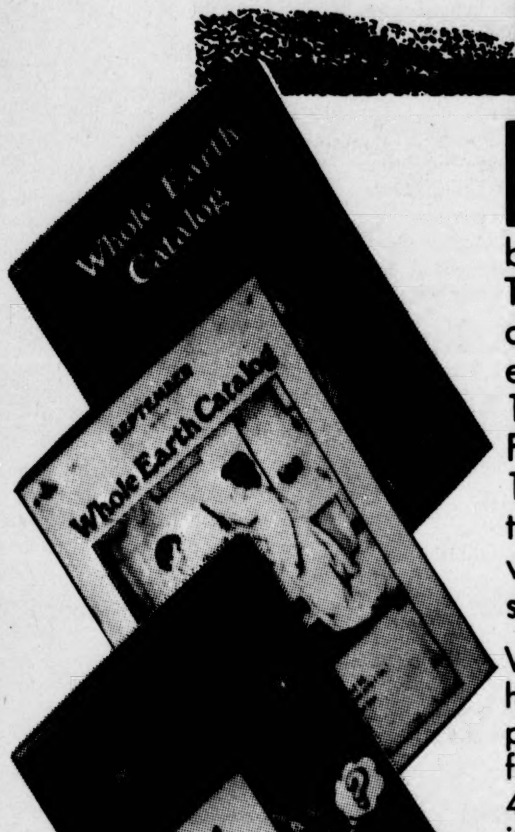
ANCIENT HISTORY Unearthed!



EVERYONE REMEMBERS the **Last Whole Earth Catalog**, yes? That big fat compendium of the entire recognized world as seen from the sixties sold 1½ million copies, became a generic name (The Whole This Catalog, The Whole That Store), and finally fathered **CoEvolution Quarterly**. It didn't just appear out of a vacuum tho, it was actually the final effort in a series begun in 1968 with a self-financed print run of 1000 that was put together by hand in a mountainside garage. Following that humble beginning it struggled for three years and 15 editions until finally 60,000 subscribers were paying $8 for two big books and four supplements each year. Then the final version came out and Fate decided that so much struggle should have a response, and thus came Fame.

Well all that story was ancient history until last month when the phone rang and an unknown friend told us she was donating 40 boxes of rare, old, pre-fame items. Our benefactor chose anonymity and said only that the gift was being given in the name of Wavy Gravy, for whom she had great respect.

Thus we're sitting here with our mysterious windfall of history. Except for a slight lingering mildew/old hippie odor the mags are in great shape. Where they spent the last dozen years remains a mystery. Our only clues come mostly from the well-worn packing cartons, which tell of several trips across the U.S. and another to Canada. We were given this gift to do with as we saw fit so we'll open it up to the readership.

So what, say you, why buy a musty relic from another epoch? Consider History, as well as Curiosity and Nostalgia. If living thru those times reshaped your life I guarantee you'll be as surprised as I was to go back for a close look. Learn once again that memory is a treacherous ally for yes, my friends, that's what we were like. Here's a mirror showing the early days of one part of the counterculture/new age/aquarian blahblah whatever you call it, that time when large numbers of people were pushed into new directions. And if you didn't know the sixties firsthand here's a fine opportunity to view some of the origins while considering what all the fuss was about. In a few years harried grad students will be seeking these out to prove their theories of social development. Beat the rush.

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For you Aussies and other dissident aliens who complain that our offers expire before surface mail brings news of their existence to your continent we'll put away a small stash for late-arriving foreign orders.

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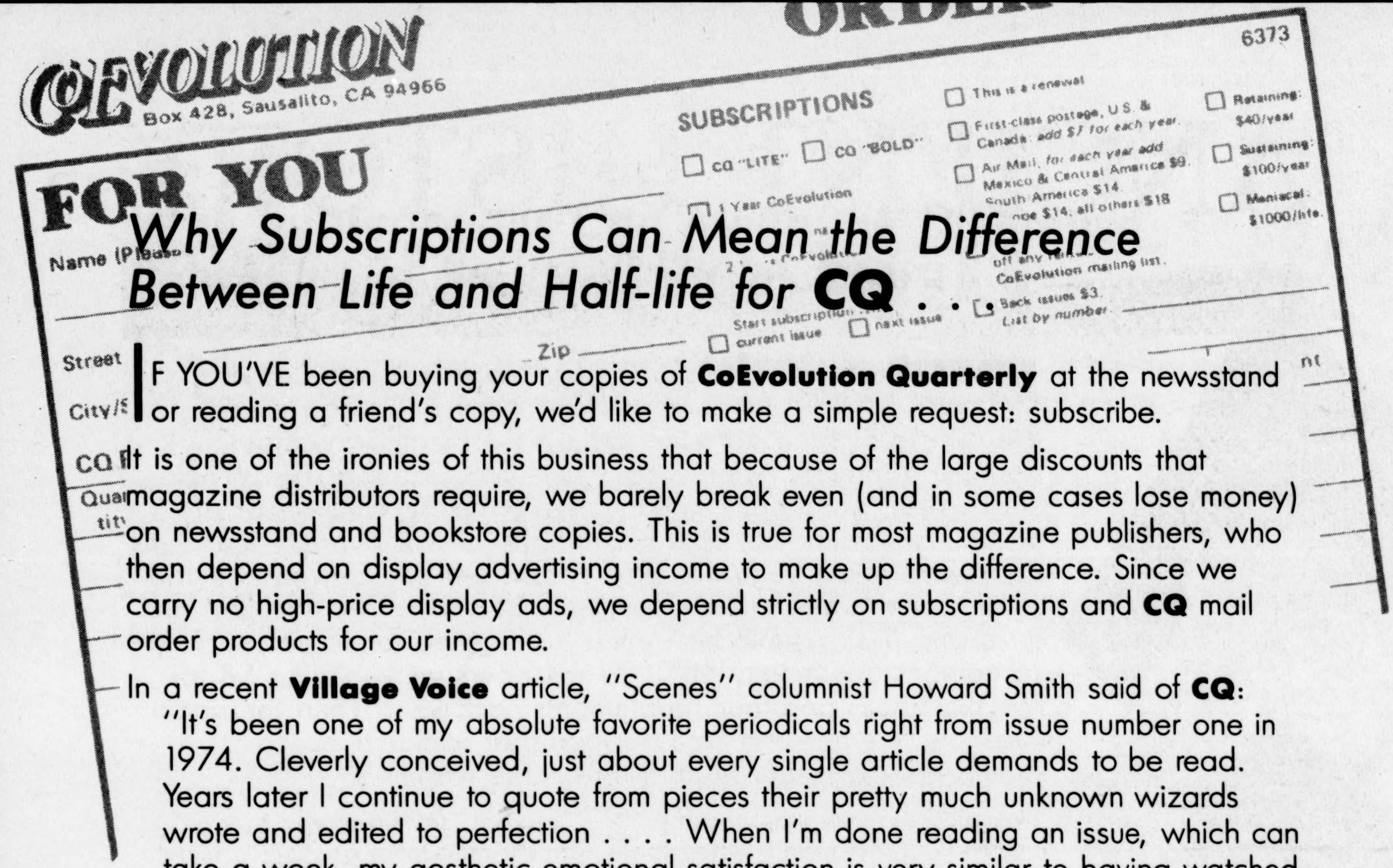

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In a recent **Village Voice** article, "Scenes" columnist Howard Smith said of **CQ**:

> "It's been one of my absolute favorite periodicals right from issue number one in 1974. Cleverly conceived, just about every single article demands to be read. Years later I continue to quote from pieces their pretty much unknown wizards wrote and edited to perfection . . . . When I'm done reading an issue, which can take a week, my aesthetic emotional satisfaction is very similar to having watched a brilliant two-hour documentary that you wish would last five."

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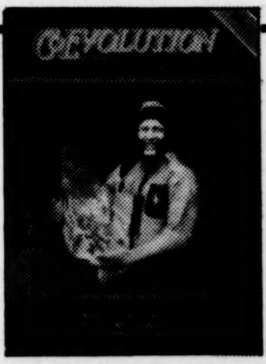
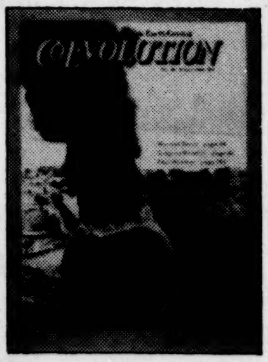
Back issues are available starting with Issue 14. (Except Issue 27, which was the **Next Whole Earth Catalog** and is not available as a back issue.) The current issue of **CoEvolution Quarterly** is **$4.50.**



No. 37, Spring, 1983. Fiction by Ken Kesey and Ursula Le Guin, Gary Snyder on urban culture in China, Steve Baer on human-machine teamwork, personal peacemaking in Kenya and Poland. Also: human devolution, deforestation, and the hidden power of local politics.



No. 36, Winter 1982. "When Things Go Wrong," a guest-edited section featuring J. Baldwin on designing with failure, Wendell Berry on the use of forms in poetry and marriage, a riveting story of ocean misfortune, and an artist called Apology. Plus letters from Gregory Bateson, Stewart Brand interviewing Paul Hawken, and the transcript of the first Creative Philanthropy Conference.

No. 35, Fall 1982. Articles on "personal national peace-finding," rules of thumb, the native spirit of gift-giving, Gregory Bateson, raw and fanciful Texas talk, and an anti-space adventure.

No. 34, Summer 1982. Donella Meadows on long-term global modeling, a doctrine of unarmed military service, Admiral Hyman G. Rickover's management philosophy, how and why to work in local politics, Michael Phillips on the persistence of Viking culture in America, Paul Hawken with good news and bad news on the economy.

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LOVE

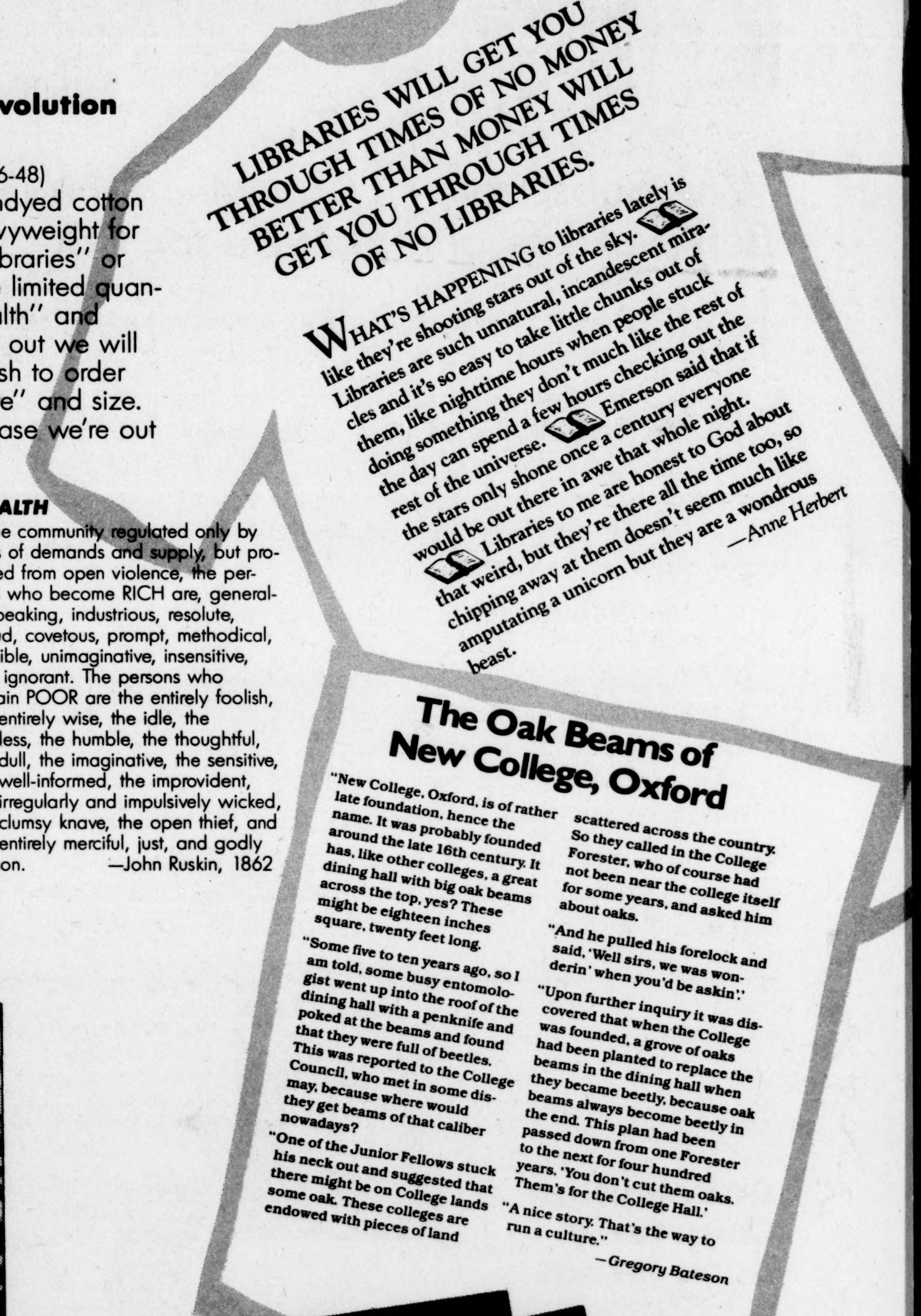
The only thing to teach is how to fall in love, what to do then to make it last. To make it a lifetime thing. To teach how to find out more about the beloved. To build something with the beloved, within the beloved. To teach all this before love ever happens so that when love comes, be it of caterpillars or dead painters or wood and nails or computers that talk back, the feeling doesn't dissipate into a hopeless infatuation — "it must be wonderful to do that, to know about that, but I can't" — but is a release of power like real love that leads to knowing more because you know where to find it, to cherishing and building in this love because you know that someone can tell you how to do it and you keep looking until you find the one who can.

—Anne Herbert

WEALTH

In the community regulated only by laws of demands and supply, but protected from open violence, the persons who become RICH are, generally speaking, industrious, resolute, proud, covetous, prompt, methodical, sensible, unimaginative, insensitive, and ignorant. The persons who remain POOR are the entirely foolish, the entirely wise, the idle, the reckless, the humble, the thoughtful, the dull, the imaginative, the sensitive, the well-informed, the improvident, the irregularly and impulsively wicked, the clumsy knave, the open thief, and the entirely merciful, just, and godly person.

—John Ruskin, 1862



LIBRARIES WILL GET YOU THROUGH TIMES OF NO MONEY BETTER THAN MONEY WILL GET YOU THROUGH TIMES OF NO LIBRARIES.

WHAT'S HAPPENING to libraries lately is like they're shooting stars out of the sky. 📖 Libraries are such unnatural, incandescent miracles and it's so easy to take little chunks out of them, like nighttime hours when people stuck doing something they don't much like the rest of the day can spend a few hours checking out the rest of the universe. 📖 Emerson said that if the stars only shone once a century everyone would be out there in awe that whole night. 📖 Libraries to me are honest to God about that weird, but they're there all the time too, so chipping away at them doesn't seem much like amputating a unicorn but they are a wondrous beast.

—Anne Herbert

The Oak Beams of New College, Oxford

"New College, Oxford, is of rather late foundation, hence the name. It was probably founded around the late 16th century. It has, like other colleges, a great dining hall with big oak beams across the top, yes? These might be eighteen inches square, twenty feet long.

"Some five to ten years ago, so I am told, some busy entomologist went up into the roof of the dining hall with a penknife and poked at the beams and found that they were full of beetles. This was reported to the College Council, who met in some dismay, because where would they get beams of that caliber nowadays?

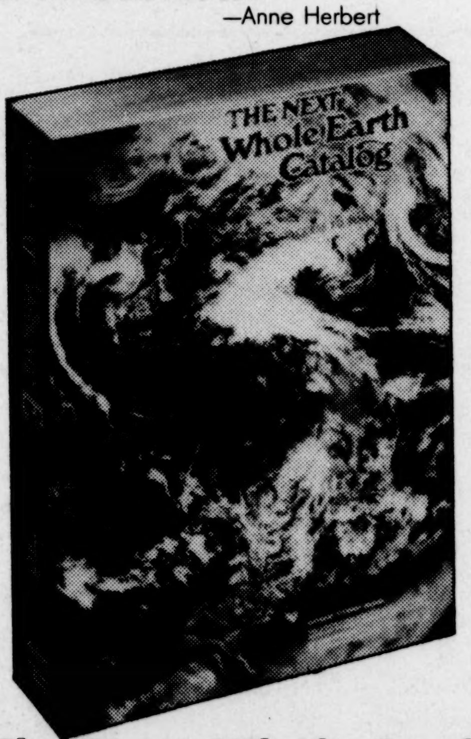
"One of the Junior Fellows stuck his neck out and suggested that there might be on College lands some oak. These colleges are endowed with pieces of land scattered across the country. So they called in the College Forester, who of course had not been near the college itself for some years, and asked him about oaks.

"And he pulled his forelock and said, 'Well sirs, we was wonderin' when you'd be askin'.'

"Upon further inquiry it was discovered that when the College was founded, a grove of oaks had been planted to replace the beams in the dining hall when they became beetly, because oak beams always become beetly in the end. This plan had been passed down from one Forester to the next for four hundred years. 'You don't cut them oaks. Them's for the College Hall.'

"A nice story. That's the way to run a culture."

—Gregory Bateson



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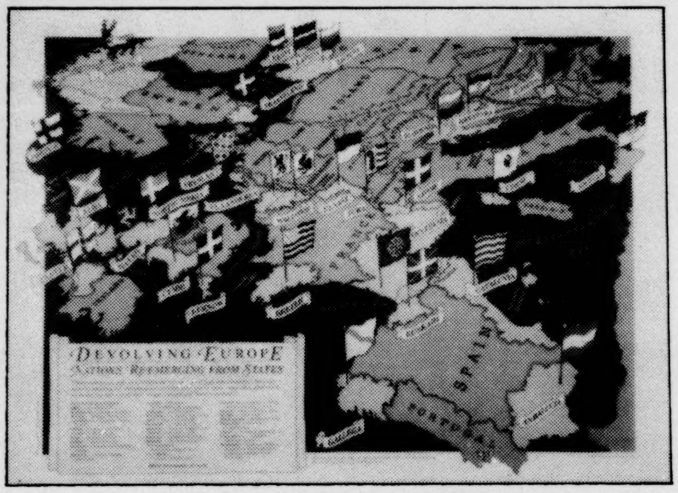
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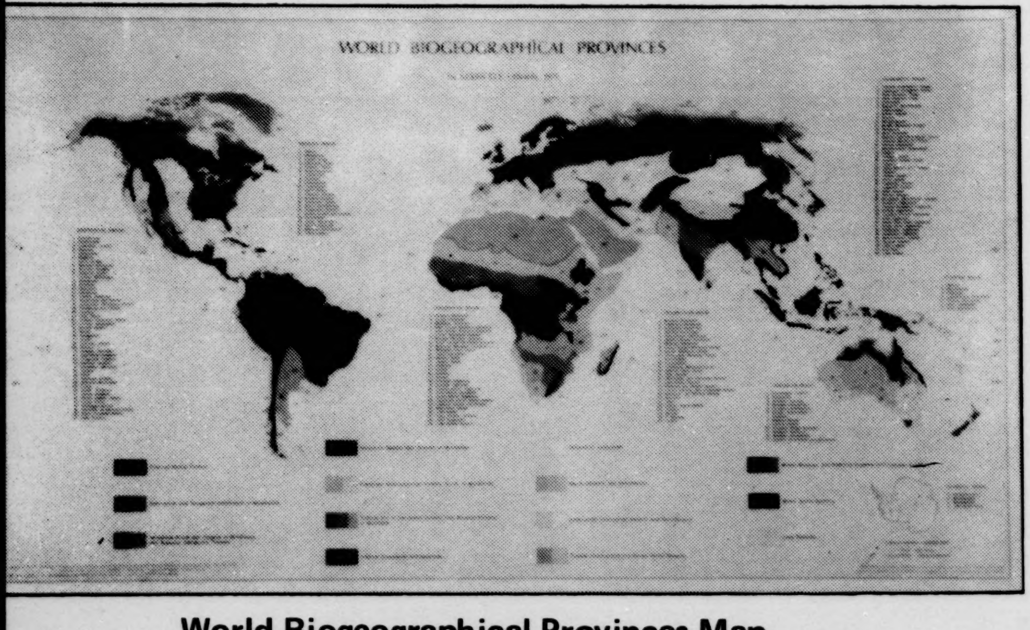
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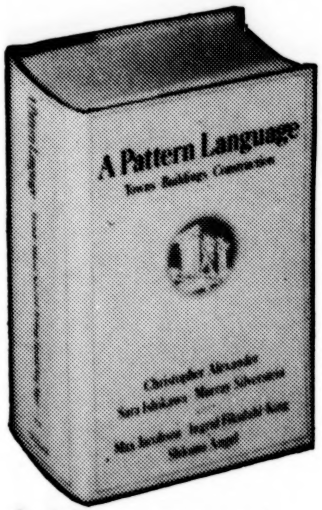
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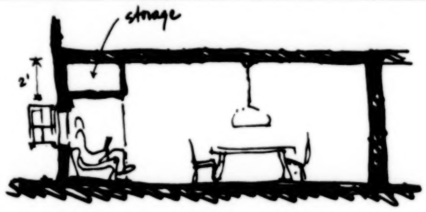
A Pattern Language, published in 1977, was 10 years in the researching and compiling. It's from Oxford University Press, and it looks like one of their durable bibles — 1440 pages of bible paper, page size only 7½″ × 5″, richly illuminated with innumerable tiny photographs, sketches, diagrams, maps, and plans, as well as a clarifying variety of typefaces on every page. Even at $45 it is a remarkable bargain.

These are some of the mind-changers in **A Pattern Language** that got me: "An exterior stair makes a wonderful house. The rooms are so far apart, psychologically, that you feel you are in a mansion . . . ."



Storage over a low ceiling

A building in which the ceiling heights are all the same is virtually incapable of making people comfortable. In some fashion, low ceilings make for intimacy, high ceilings for formality. In older buildings which allowed the ceiling heights to vary, this was almost taken for granted. However, in buildings which are governed by standard components, it is very hard to make the ceiling height vary from room to room, so it tends to be forgotten.

"There is abundant evidence to show that high buildings make peole crazy." (Alexander recommends a maximum of four stories.) "Buildings must always be built on those parts of the land which are in the worst condition, not the best . . . ."

"When plate glass windows became possible, people thought that they would put us more directly in touch with nature. In fact they do the opposite. It is the multitude of frames which makes the view. The panes should hardly ever be more than a foot square."

The premise of the book is a highly conservative inquiry — what are the elements that make people love the best of existing towns and buildings? **A Pattern Language** is antidote, I wonder, to what poison? How, in all our prosperity, did we so utterly lose track of what feels best, works best? —Stewart Brand

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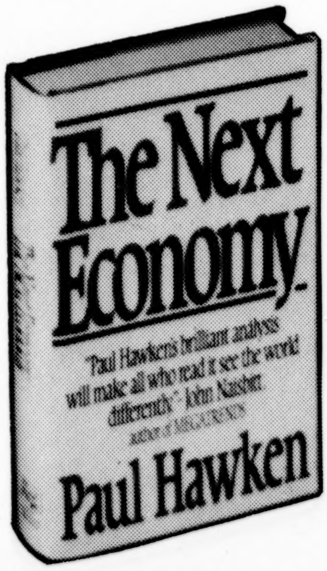
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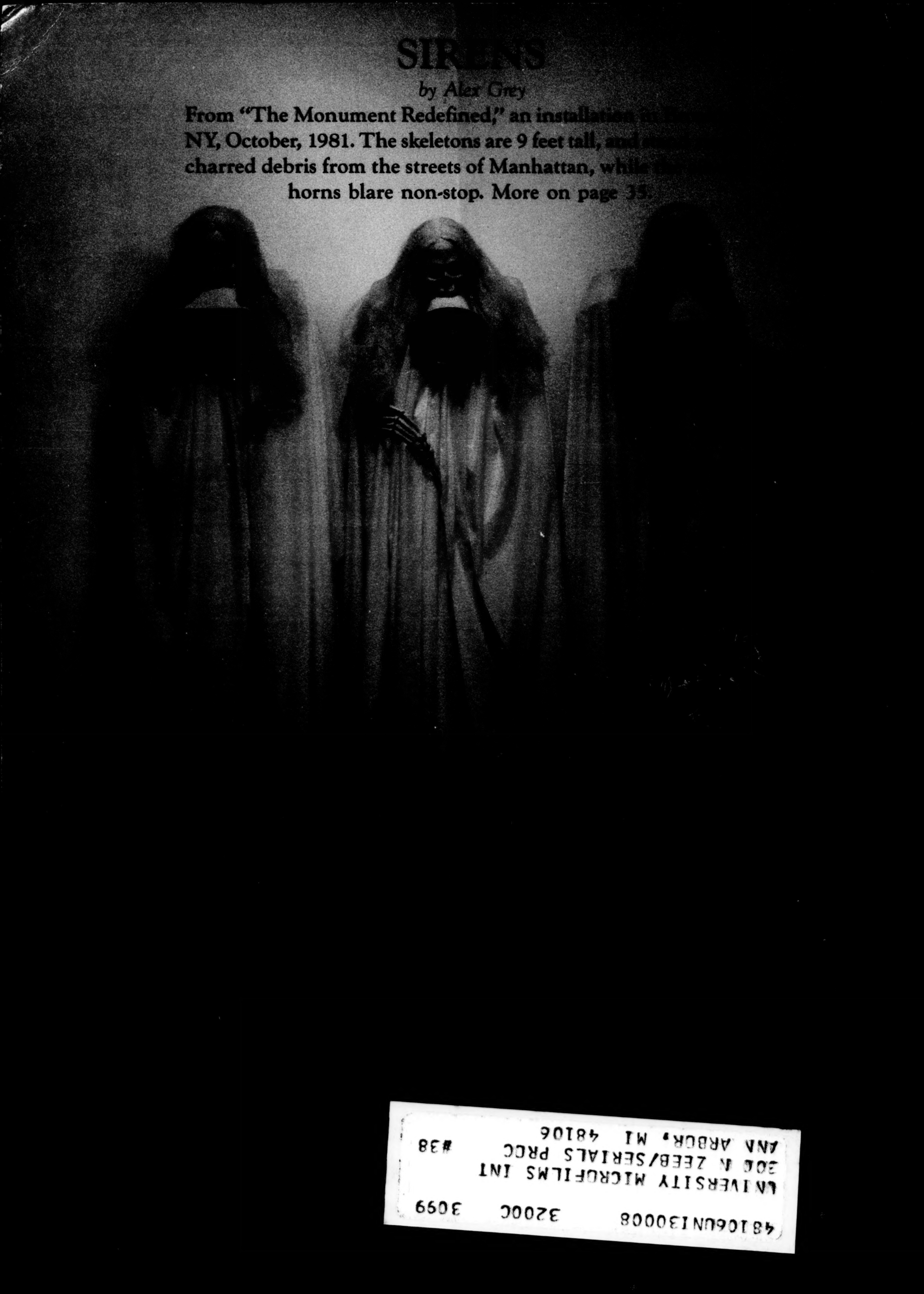

SIRENS

by Alex Grey

From "The Monument Redefined," an installation [illegible] NY, October, 1981. The skeletons are 9 feet tall, and [illegible] charred debris from the streets of Manhattan, while [illegible] horns blare non-stop. More on page 35.

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